FILE NOTATIONS

Entered in N I D File		Checked by Chief	
Entered On S R Sheet		Copy N I D to Field Office	
Location Map Pinned		Approval Letter	
Card Indexed	✓	Disapproval Letter	
I W R for State or Fee Land			

COMPLETION DATA:

Date Well Completed	8-9-35	Location Inspected	
OW	WW	TA	Bond released
GW ✓	OS	PA	State of Fee Land

LOGS FILED

Driller's Log ✓

Electric Logs (No.) ✓

E | I | E-I | GR | GR-N | Micro

Lat | Mi-L | Sonic | Others

Form 9-331a
(March 1942)

c o p y

Budget Bureau No. 42-R358.1.
Approval expires 11-30-40.

(SUBMIT IN TRIPLICATE)

Land Office Salt Lake City, Utah
Lease No. 045051(a)
Unit Lease

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	X	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

R. D. Murphy #2 Rock Springs, Wyo. - June 28th, 19 34

Well No. 2 is located 1120 ft. from {N/S} line and 660 ft. from {E/W} line of sec. 21

NE¼ NE¼ Sec. 21 (¼ Sec. and Sec. No.) | 3 N. 24 E. (Twp. / Range) | Salt Lake (Meridian)

Clay Basin (Field) | Sargett (County or Subdivision) | Utah (State or Territory)

The elevation of the derrick floor above sea level is 6485 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

We would like permission to drill this well with rotary tools to gas production which we would expect to find at approximately 6000 feet.

It would be our intention to set a condtuctor string of 12-1/2" casing at 200 feet and cement from top to bottom, then a string of 8-5/8" - 32# - API Seamless casing at 5500 feet and a string of 6-5/8" - 26# - API Seamless casing at 6000 feet.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company MOUNTAIN FUEL SUPPLY CO.
Address Box 878 Rock Springs, Wyo.
Approved July 13, 1934 (see attached form)
R. D. Ferguson
Petroleum Engineer
Casper, Wyoming

By C. R. Metzler
Title Vice Pres. & Gen. Mgr.

U. S. GOVERNMENT PRINTING OFFICE 16-8487-3

Form 9-331a
(March 1942)

Budget Bureau No. 42-R358.1.
Approval expires 11-30-49.

Land Office Salt Lake
Lease No. 045051-A
Unit L

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			
Notice of Cementing Conductor String			XX

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

A. D. Murphy #2 Rock Springs, Wyo. August 6, 1934

Well No. 2 is located 1120 ft. from {N / S} line and 660 ft. from {E / W} line of sec. 21

NE¼ NE¼ Sec. 21 (¼ Sec. and Sec. No.) | 3 N. (Twp.) | 24 E. (Range) | (Meridian)

Clay Basin (Field) | Daggett (County or Subdivision) | Utah (State or Territory)

The elevation of the derrick floor above sea level is 6485 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

A conductor string of 15-1/2" - 70# - 10 Thread DBX casing was landed and cemented on August 3, 1934 as follows:

10 Jts., - 189'8" Gross, 187'2" Net, landed on casing clamps at 199'10" - 12' 8" below the derrick floor. Cemented with 150 sacks of Ideal Portland Cement, last 50 sacks treated, by Perkins Oil Well Cementing Company. Baker casing shoe used, spot welded. First 4 joints spot welded above and below collars.

Kindly advise this office of tests made for placement of cement and shut off of water if any.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company MOUNTAIN FUEL SUPPLY CO.

Address Rock Springs, Wyoming

Approved August 13, 1934
A. D. Ferguson
District Engineer
Casper, Wyoming

By C. A. Hetzler

Title Vice Pres. & Gen. Manager

U. S. GOVERNMENT PRINTING OFFICE 16-8437-3

Form 9-331a
(March 1942)

c o p y

Budget Bureau No. 42-R358.1.
Approval expires 11-30-49.

(SUBMIT IN TRIPLICATE)

Land Office Salt Lake

Lease No. 04501-A

Unit L

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			
Subsequent Report of Cementing Conductor String			xx

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

R. D. Murphy #2 August 18, 1934, 19

Well No. 2 is located 1120 ft. from {N/S} X line and 660 ft. from {E/W} X line of sec. 21

NE¼ NW¼ Sec. 21 (¼ Sec. and Sec. No.) 5 N (Twp.) 24 E (Range) 21 (Meridian)

Clay Basin (Field) Daggett (County or Subdivision) Utah (State or Territory)

The elevation of the derrick floor above sea level is 6485 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

The approved notice returned to us requested information regarding placement of cement.

Sufficient cement was put around this string of casing to bring the cement back up around the casing to the surface. No test for water shutoff was made.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company MOUNTAIN FUEL SUPPLY CO.

Address Rock Springs, Wyoming

Approved October 26, 1934
R. D. Ferguson
Dist. Engr.
Casper, Wyo.

By C. A. Hetzler

Title Vice Pres. & Gen. Manager

U. S. GOVERNMENT PRINTING OFFICE 16-8437-3

Form 9-331a
(March 1942)

o p

Budget Bureau No. 42-R358.1.
Approval expires 11-30-49.

Land Office Salt Lake
Lease No. 045051-A
Unit L

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			
Notice of Intention to Cement 8-5/8" Casing			xx

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

R.D. Murphy Well #2 — Rock Springs, Wyo. - Oct. 6th, 1934

Well No. 2 is located 1120 ft. from {N / S} line and 660 ft. from {E / W} line of sec. 21

NE¼ NE¼ Sec. 21 — 3 N. 24 E. — ———
(¼ Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Clay Basin — Daggett — Utah
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 6485 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

We encountered the Dakota sand in this well at a depth of 5627 feet. We would like permission to cement a string of 8-5/8" - 32# and 36# - API seamless casing on top of this sand with 500 sacks of cement.

Kindly advise this office as to when the well will be tested.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company MOUNTAIN FUEL SUPPLY CO.

Address Rock Springs, Wyoming

Approved October 12, 1934
R. D. Ferguson
District Engineer

By C. R. Metzler

Title Vice-Pres. & Gen. Mgr.

U. S. GOVERNMENT PRINTING OFFICE 16-8437-3

Form 9-331a
(March 1942)

Copy

Budget Bureau No. 42-R358.1.
Approval expires 11-30-49.

(SUBMIT IN TRIPLICATE)

Land Office Salt Lake
Lease No. 045051-A
Unit L

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			
Notice of Cementing 8-5/8" casing			XX

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

R. D. Murphy Well #2 Rock Springs, Wyo. Oct. 15, 1934

Well No. 2 is located 1120 ft. from {N/S} line and 660 ft. from {E/W} line of sec. 21

NE¼ NE¼ Sec. 21 (¼ Sec. and Sec. No.) 3 N. (Twp.) 24 E. (Range) (Meridian)

Clay Basin (Field) Daggett (County or Subdivision) Utah (State or Territory)

The elevation of the derrick floor above sea level is 6485 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

In accordance with our "Notice of Intention to Cement 8-5/8" Casing" dated October 6, 1934, we cemented the 8-5/8" string of casing in this well on October 9th. See attached sheet for details.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company MOUNTAIN FUEL SUPPLY COMPANY

Address Rock Springs, Wyoming

Approved October 19, 1934
R. D. Ferguson
Dist. Engr.
Casper, Wyo.

By C. K. Hetzler

Title Vice Pres. & Gen. Mgr.

U. S. GOVERNMENT PRINTING OFFICE 16-6437-3

R. D. MURPHY WELL #2
Sec. 21-3-24
Daggett County, Utah

77 Jts. 2256' 1" Gross, 2236' 5" Net, 8-5/8"-36# 8 Thd. API Seamless
153 Jts. 3436' 1" " 3397'10" " 8-5/8"-32# 10 Thd. "
230 Jts. 5692' 2" Gross 5634' 3" Net, Cemented at depth of 5627', 7' 3" below the derrick floor.

Baker Whirler Cement Float Shoe used on bottom. Baker Float Collar used two joints from bottom. Shoe joint was 8-5/8" - 32# - 10-Thread National API Seamless casing 31' long. Second joint was 8-5/8" - 36# - 8-Thread Youngstown API Seamless casing 20' 3" long, with 10 thread on bottom and 8 thread on top. Baker Float Collar put on this joint. 79th joint was change joint from 8-thread to 10-thread, and was 8-5/8" - 32# casing 11' 5" long. First 7 joints spot welded above and below collars. Cemented by Perkins Oil Well Cementing Company with 632 sacks of Monolith cement.

SUPERVISION,

OIL AND GAS DEVELOPMENT ON THE PUBLIC DOMAIN

D. MURPHY WELL NO. 2

CC ERATIVE SUPERVISION WITH ICE OF INDIAN AFFAIRS

OIL AND GAS DEVELOPMENT ON DEPARTMENTAL LEASES

UNITED STATES

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Midwest, Wyoming.

December 14, 1934.

Mr. W. T. Nightingale,
Mountain Fuel Supply Company,
Rock Springs, Wyoming.

Dear Sir:

Average porosities upon the core samples from Clay Basin, Well No. 2, were as follows;

Depth	Sand grain density	% of voids
5334	2.6231	2.0
5650	2.5549	14.9
5653-60	2.6147	12.9
6014	2.6332	11.7
6030	2.6022	14.1

Very truly yours,

C. A. Hauptman

C. A. Hauptman
Engineer-in-Charge.

19

SUPERVISION,

OIL AND GAS DEVELOPMENT ON THE PUBLIC DOMAIN

C ERATIVE SUPERVISION WITH FFICE OF INDIAN AFFAIRS

OIL AND GAS DEVELOPMENT ON DEPARTMENTAL LEASES

UNITED STATES

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Casper, Wyoming

December 26, 1934.

Mr. W. T. Nightingale
Mountain Fuel Supply Company
Rock Springs, Wyoming

Subject: Salt Lake 045051,
Clay Basin, Utah

Dear Sir:

The following sand porosities were secured on samples from Clay Basin:

Depth	Sand Grain Density	Per Cent Voids
5334	2.6231	2.0
5650	2.5549	14.9
5653-60	2.6147	12.9
6014	2.6332	11.7
6030	2.6022	14.1

The samples shown as 5334, 5650, 5652-60 were the large size core, 3-inch, and may be in error as to depth.

Very truly yours,

R. D. Ferguson

R. D. FERGUSON
District Engineer

95

Form 9-331a
(March 1942)

c o p y

Budget Bureau No. 42-R358.1.
Approval expires 11-30-40.

(SUBMIT IN TRIPLICATE)

Land Office Salt Lake

Lease No. 045051-A

Unit I

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			
Notice of Intention to Resume	Drilling Operations		xx

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

R. D. Murphy Well #2 Rock Springs, Wyo. June 8, 1935

Well No. 2 is located 1120 ft. from {N / S} line and 660 ft. from {E / W} line of sec. 21

NE¼ NE¼ Sec. 21 (¼ Sec. and Sec. No.) 3 N. (Twp.) 24 E. (Range) (Meridian)

Clay Basin (Field) Daggett (County or Subdivision) Utah (State or Territory)

The elevation of the derrick floor above sea level is 6485 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

It is our intention to resume drilling operations at this well June 10th. Operations were discontinued in November 1934 at a depth of 6,030 feet on account of unfavorable weather conditions.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company MOUNTAIN FUEL SUPPLY CO.

Address ~~XXXXXXXXXX~~ Rock Springs, ~~Wyoming~~

Approved July 5, 1935

A. D. Ferguson
District Engr.
Casper, Wyo.

By C. A. Metzler

Title Vice Pres. & Gen. Mgr.

U. S. GOVERNMENT PRINTING OFFICE 16-8437-3

Form 9-331a
(March 1942)

C c o p y C

Budget Bureau No. 42-R358.1.
Approval expires 11-30-49.

(SUBMIT IN TRIPLICATE)

Land Office Salt Lake

Lease No. 045051-A

Unit

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			
Notice of Intention to Plug	Back		X

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

A. D. Murphy Well #2 Rock Springs, Wyo. July 24, 1935

Well No. 2 is located 1120 ft. from {N/S} x line and 600 ft. from {E/W} x line of sec. 21

NE¼ Sec. 21 (¼ Sec. and Sec. No.) | 3 N (Twp.) | 24 E. (Range) | (Meridian)

Clay Basin (Field) | Barrett (County or Subdivision) | Utah (State or Territory)

The elevation of the derrick floor above sea level is 6485 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

See attached sheet

Kindly disregard previous instructions in regard to plugging back this well.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Mountain Fuel Supply Company

Address Rock Springs, Wyoming

Approved July 27, 1935

By C. A. Metzler

A. D. Ferguson
Petroleum Engineer

Title Vice Pres. & Gen. Manger

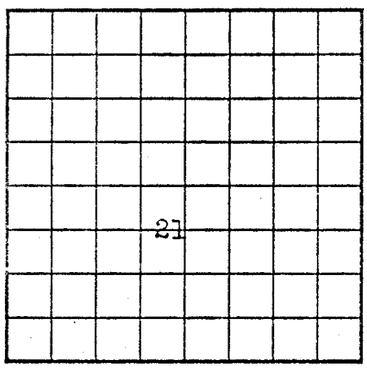
Casper, Wyo.

U. S. GOVERNMENT PRINTING OFFICE 16-8437-3

c o p y

Form 9-330

U. S. Land Office Salt Lake
Serial Number 045 51-A
Lease or Permit to Prospect L



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Mountain Fuel Supply Co. Address Rock Springs, Wyoming
Lessor or Tract A. D. Murphy Field Clay Basin State Utah
Well No. 2 Sec. 21 T. 3 R. 24 Meridian ____ County Daggett
Location 1120 ft. {N.} of N. Line and 660 ft. {E.} of E. Line of Sec. 21 Elevation 6485
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed C. R. Hetzler
Date September 14, 1935 Title Vice Pres. & Gen. Mgr.

The summary on this page is for the condition of the well at above date.

Commenced drilling July 30, 1934 Finished drilling August 9, 1935

OIL OR GAS SANDS OR ZONES

(*Denote gas by G*)

No. 1, from 5328 to 5344 G No. 4, from 5724 to 5744 G
No. 2, from 5627 to 5660 G No. 5, from ____ to ____
No. 3, from 5677 to 5690 G No. 6, from ____ to ____

IMPORTANT WATER SANDS

No. 1, from 6009 to 6037 No. 3, from ____ to ____
No. 2, from 6521 to 6643 No. 4, from ____ to ____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
15-1/2	70#	10	DBX	199'10"	Baker				Conductor
8-5/8	32&36	8 & 10	API	5626'7"	Baker				Production
6-5/8"	26#	10	API	5621-5868					Liner
2-1/2	6.5	10	API	5671					Production

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
15-1/2	199'10"	150	Perkins		
8-5/8	5626'7"	632	Perkins		

FOLD | MARK

PLUGS AND ADAPTERS

Heaving plug—Material ____ Length ____ Depth set ____
Adapters—Material ____ Size ____

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from 0 feet to 6799 feet, and from ____ feet to ____ feet
Cable tools were used from ____ feet to ____ feet, and from ____ feet to ____ feet

DATES

____, 19____ Put to producing ____, 19____

The production for the first 24 hours was 144 barrels of fluid of which ____ % was oil; ____ % emulsion; ____ % water; and ____ % sediment. Gravity, °Bé. ____

If gas well, cu. ft. per 24 hours 32,000,000 Gallons gasoline per 1,000 cu. ft. of gas ____
Rock pressure, lbs. per sq. in. 2220

No. 2, from 6521 to 6643 No. 4, from ..... to .....

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
15-1/2	70#	10	DBX	199'10"	Baker				Conductor
8-5/8	32&36	8 & 10	API	5626'7"	Baker				Production
6-5/8"	26#	10	API	5621-5868					Liner
2-1/2	6.5	10	API	5671					Production

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
15-1/2	199'10"	150	Perkins		
8-5/8	5626' 7"	632	Perkins		

PLUGS AND ADAPTERS

Heaving plug—Material ..... Length ..... Depth set .....

Adapters—Material ..... Size .....

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from 0 feet to 6799 feet, and from ..... feet to ..... feet

Cable tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet

DATES

....., 19..... Put to producing ....., 19.....

The production for the first 24 hours was 144 barrels of fluid of which ..... % was oil; ..... % emulsion; ..... % water; and ..... % sediment. Gravity, °Bé. .....

If gas well, cu. ft. per 24 hours 32,000,000 Gallons gasoline per 1,000 cu. ft. of gas .....

Rock pressure, lbs. per sq. in. 2220

EMPLOYEES

Ralph Jones, Driller E. Brune, Driller

Cody A. Spencer, Driller J. E. Frazier, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
			See attached log

°Note: Well made 144 barrels of 61 gravity oil with the well flowing 13,000,000 cu. ft. through the tubing with 1150 pounds back pressure on the casing.

2-3

(OVER)

8—6745

FOLD | MARK

COPY

CONDENSATE FROM [illegible]AP, produced with gas from Dakota sands 5727-5760, Mountain Fuel Supply Co's "Robert Murphy #2", Section 21, 3-24, Clay Basin structure, Daggett County, Utah

THE OHIO OIL COMPANY

Robinson, Ill.
September 14, 1935

Mr. John McFadyen
The Ohio Oil Company
Casper, Wyoming

Dear Sir:

The following analysis was made on sample of oil from the Robert D. Murphy Well #2, located in Section 21, Township 3 North, Range 24 East, in Clay Basin Field, Daggett County, Utah:

	Original Sample	Sample after run to 410 F. end point with Hempel Column.
Gravity	60/1	59/9
Color	Yellow	30
Doctor	Sweet	Sweet
Corrosion	Good	
Octane No.	54.0	54.0
Distillation		
IBP	126	130
10	178	186
20	200	204
30	216	216
40	230	228
50	244	242
60	258	256
70	276	276
80	300	310
90	352	344
EP	446	410
Rec.	98	98
Res.	1	1
Loss	1	1

92% Overhead
7% Bottoms (Straw Gas Oil)
1% Loss

Although the color is yellow and the end point 446, it is our opinion that this gasoline could be marketed, as is, as a third grade material. In the event the natural color is objectionable, dye could be added to give it a distinctive color or it could be filtered through fullers earth to a clear color of 25 or better.

You will note from the Hempel Column Distillation that the lower end point, namely 410, will yield approximately 92% gasoline. In this event, however, it might be well to blend natural gasoline (Casinghead) in order to lower the initial and 10% points.

This gasoline is sweet before redistillation as well as after so in either case it would not be necessary to subject it to any chemical treatment.

Yours truly,

(Signed) R. E. Luton

REL:TS
CC: C. R. Metzler
G. W. Uzzell

C C

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P
Y

September 14, 1935

Mr. John McFadyen
The Ohio Oil Company
Casper, Wyoming

Dear Sir:

The following analysis was made on sample of oil from the Robert D. Murphy Well #2, located in Section 21, Township 3 North, Range 24 East, in Clay Basin Field, Daggett County, Utah:

	Original Sample	Sample after run to 410 F. end point with Hempel Column.
Gravity	60/1	59/9
Color	Yellow	30
Doctor	Sweet	Sweet
Corrosion	Good	
Octane No.	54.0	54.0
Distillation		
IBP	126	130
10	178	186
20	200	204
30	216	216
40	230	228
50	244	242
60	258	256
70	276	276
80	300	310
90	352	344
EP	446	410
Rec.	98	98
Res.	1	1
Loss	1	1

92% Overhead
7% Bottoms (Straw Gas Oil)
1% Loss

Although the color is yellow and the end point 446, it is our opinion that this gasoline could be marketed, as is, as a

third grade material. In the event the natural color is objectionable, dye could be added to give it a distinctive color or it could be filtered through fullers earth to a clear color of 25 or better.

You will note from the Hempel Column Distillation that the lower end point, namely 410, will yeild approximately 92% gasoline. In this event, however, it might be well to blend natural gasoline (Casinghead) in order to lower the initial end 10% points.

This gasoline is sweet before redistillation as well as after so in either case it would not be necessary to subject it to any chemical treatment.

Yours truly,

REL:TS
CC: C. R. Hetzler
G. W. Uzzell

2

GAS ANALYSIS

Condition of sample ..... Laboratory No. 36-C4

Analysis by J. G. Crawford at Midwest, Wyoming Date 9-16-35

ORSAT ANALYSIS

Carbon dioxide (CO_2)	0.0%
Oxygen (O_2)	0.3%
Methane (CH_4)	72.5%
Ethane (C_2H_6) and higher	13.0%
Nitrogen (N_2) by difference	14.2%
Specific Gravity (Calculated)	.679
Specific Gravity (Observed)	.689
Calculated Gross B. T. U. per cu. ft. at 60° F. and 15.025 lbs. per sq. inch preccure	980

HYDROGEN SULPHIDE BY TUTWILER METHOD

Grains of hydrogen sulphide per 100 cu. ft. of gas at 60° F. and 15.025 lbs. per sq. in. .....

Percentage of hydrogen sulphide at 60° F. and 15.025 lbs. per sq. in.....

HEATING VALUE BY SARGENT GAS CALORIMETER

B. T. U. per cu. ft. at 60° F. and 15.025 lbs. per sq. inch. pressure as determined by Sargent gas calorimeter:

Gross	1132
Net	1041

Remarks and conclusions:

R. D. MURPHY #2 Unit #2

Core Analysis by V. B. Gras
Sample Analysis 5562-5534 by V. B. Gras

Core #1 5294-5311.5; rec. 17.5'

9.0' - Shale, black, with gray sandstone streaks
1.0' - Shale, black, with slickensides at base
5.0' - Sandstone, fine-grained, hard, coherent, cross-bedded, with black shale particles and occasional streaks of black shale up to 3" through.
1.5' - Shale, sandy, dark gray
1.0' - Sandstone, as above.

Core #2 5311.5 - 5326; rec. 14.5'

2.5' - Shale, sandy, interbedded black and gray, with streaks of sandstone, light gray, fine-grained, hard.
12.0' - Sandstone, fine-grained, hard, coherent, porous, cross-bedded, light gray with black grains and occasional black shale partings, streaks and particles.

Core #3 5326 - 5344; rec. 18'
1.0' - Sandstone as above
1.0' - Shale, sandy, black, hard
16.0' - Sandstone, medium-grained, hard, coherent, very porous, light gray with black grains and coal partings.

Core #4 5344-5349; rec. 5'

1.5' - Shale, sandy in part, black, hard, with streaks of sandstone, light gray, medium-grained.
4.5' - Sandstone, medium-grained, hard, incoherent, light gray with black grains and black carbonaceous shale partings and some coal streaks.

Core #5 5349-5357; rec. 8'

1.0' - Shale, black, hard, with streaks of sandstone, light gray; some coal streaks.
7.0' - Sandstone, medium-grained, hard, coherent, light gray with black carbonaceous shale partings.

Core #6 5357-5361; rec. 3'

1.0' - Sandstone as above
1.5' - Sandstone as above interbedded with shale, black, carbonaceous; bedding at high angle; shale highly slickensided.
0.5' - Sandstone, coarse-grained, hard, light gray, with inclusions of gray shale up to 1/2" across and inclusions of coal.

Core #7 5361-5363; rec. 1.5'

1.5' - Interbedded thin beds of shale, black, carbonaceous, and sandstone, light gray

Core #11 5366-5382; rec. 12'

12.0'- Interbedded shale, sandy, black, cross-bedded, and shale, sandy, dark gray

Core #12 5382-5400; rec. 18'
4.0' - Shale, sandy, hard, black
1.5' - Sandstone, fine-grained, hard, light gray
12.5' - Shale, silty, hard, black

Core #13 5400-5418; rec. 18'
12.0' - Shale, silty, black, hard
6.0' - Shale, black, hard

Core #14 5418-5436; rec. 18'

4.5' - Shale, black, hard
0.5' - Shale, black, hard (fragments)
3.0 - Shale, black, hard
1.0' - Bentonite, sandy, light gray
9.0' - Shale, hard, black

Core #15 5436-5434; rec. 18'

7.0' - Shale, black, hard
4.5' - Bentonite, silty, light gray
5.5' - Shale, black, hard
1.0' - Shale, black, hard, with streaks of bentonite, light gray.

Core #16 5454-5461; rec. 3.5'

1.0' - Shale, black, hard
2.0' - Bentonite, silty, hard, light gray
1.5' - Shale, black, hard

6444
5622
822

Top Kd sd. 5622

Core #17 5634-5652; rec. 15'

3.0' - Sandstone, fine-grained, hard, cross-bedded, light gray with black laminations.
10.0' - Sandstone, medium-grained, hard, very porous, light gray
1.0' - Sandstone, fine-grained, hard, quartzitic, white
1.0' - Sandstone, coarse-grained, hard, cross-bedded, very porous, light gray with black shale laminations

Core #18 5655-5657; rec. 2'

2.0' - Sandstone, medium-to coarse-grained, hard, light gray, with light gray shale inclusions and black shale streaks; some quartzitic streaks

Core #21 5667-5677; rec. 10'

2.0' - Shale, soft, black; slakes into nodular and rounded fragments
2.5' - Shale, silty, soft, dark gray
0.5' - Shale, silty, hard, medium-gray
2.0' - Shale, silty, soft, dark gray
3.0' - Sandstone, argillaceous, fine-grained, hard, light green to light gray, thin-bedded, with dark shale partings

Core #22 5677-5688; rec. 8'

8.0' - Sandstone, medium-grained, hard, cross-bedded, porous, light gray with black shale partings and laminations

Core #23 5690-5692; rec. 1'

1.0' - Shale, sandy, hard, medium gray

Core #26 5731-5746; rec. 1'

0.8' - Shale, sandy, soft, light to medium gray
0.2' - Sandstone, medium-grained, hard, porous, quartzitic, greenish-gray

Core #28 5749-5764; rec. 5'
5.0' - Shale, soft, light greenish-gray, pyrite

Core #31 5766.5-5768; rec. 1'

1.0' - Shale, sandy, dark gray; shale, olive-green, sandstone, medium-grained, hard, green

Core #32 5768-5774; rec. 6'

6.0' - Shale, hard, mottled dark gray and olive-green

Core #33 5774-5780; rec. 6'

6.0' - Shale, hard, olive-green

Core #34 5780-5792; rec. 12'

3.0' - Shale as above
9.0' - Shale, sandy, hard, mottled medium gray and olive-green

Core #35 5792-5809; rec. 17'

6.0' - Shale, silty, hard, mottled medium-gray and olive-green
11.0' - Shale, sandy, hard, mottled medium gray and olive-green

Core #36 5809-5812; rec. 2.5'

0.5' - Shale, soft, green
0.5' - Sandstone, fine-grained, argillaceous, green
1.5' - Sandstone, coarse-grained, hard porous, light gray

Core #37 5812-5821; rec. 9'

3.0' - Shale, hard, black
6.0' - Shale, hard, purple, with calcite streak in middle

Core #38 5916-5918; rec. 2'

0.5' - Sandstone, fine-grained, hard, medium gray, with brown shale pebble inclusions
1.5' - Shale, hard, purple

Core #40 6014-6030; rec. 16'

1.0' - Sandstone, medium-grained, hard, slightly calcareous very porous, light gray with occasional purple shale streaks
3.0' - Sandstone, medium-grained, hard, porous, light gray
9.0' - Sandstone, coarse-grained, hard, porous, light gray, with variegated chert pebbles up to 1/2" across and purple shale streaks
3.0' - Grit, fine, hard, very porous, light gray, with purple shale streaks

Core #42 6037-6039; rec. 1'

1.0' - Shale, soft, mottled light green, purple, and brick-red

Core #43 6416-6436; rec. 15'

2.0' - Limestone, very finely oolitic, black, very hard, with brachiopod shell fragments and black shale partings
1.0' - Sandstone, very fine-grained, very hard, very calcareous, tight, medium gray
3.0' - Limestone, very finely oolitic, very hard, black, with abundant shell fragments and black shale partings
1.0' - Shale, hard, black, with some streaks of sandstone, gray, fine-grained
2.0' - Limestone, oolitic, very hard, black and dark gray, with abundant shells and shell fragments and occasional black shale partings
3.0' - Shale, hard, cross-bedded, black, with streaks of sandstone, fine-grained, hard, very calcareous
1.0' - Limestone as above
2.0' - Shale as above

Core #44 6436-6445; rec. 13' (upper 4' belongs to core #43)

4.0' - Sandstone, fine-grained, very calcareous, very hard, dark greenish-gray with black shale partings
2.0' - Shale, hard, black, with streaks of sandstone as above
1.0' - Sandstone as above
6.0' - Shale and sandstone as above, cross-bedded and interbedded

Core #45 6445-6485; rec. 18'

12.0' - Shale and sandstone as above
6.0' - Limestone, hard, sandy, black to dark gray with abundant brachiopod shells and fragments

Core #46 6485-6501; rec. 15'

15.0' - Limestone as above; Belemnites at base

Core #47 6501-6505; rec. 2'

2.0' - Limestone as above

Core #48 6505-6510.5; rec. 2'

2.0' - Limestone as above

Sample Analysis

5562-5567	Shale, hard, black
5567-5572	Shale, as above, with trace of sandstone, medium-grained, hard, light gray
5572-5587	Shale and sandstone as above, with trace of bentonite, light gray
5587-5597	Shale, hard, black, with bentonite, light gray; sandy in part
5597-5602	Shale and bentonite as above, with coal streaks
5602-5607	Shale, hard, dark gray, with light gray bentonite; trace sandstone, light gray
5607-5612	Shale as above; no sandstone
5612-5622	Shale as above, with trace of sandstone, light gray, fine- to coarse-grained

Sample Analysis (Cont'd)

Top Dakota Sandstone

5622-5627	Shale, hard, dark gray, and sandstone, fine-to coarse-grained, hard, light gray
5627-5632	Shale and sandstone as above with some light blue-gray chert and pyrite
5632-5634	Sandstone, fine- to coarse-grained, hard, light gray, quartzitic, with inclusions of light blue-gray chert, and with shale, hard, dark gray

COPY

UTAH OIL REFINING COMPANY
Salt Lake City, Utah

September 10, 1937

E. S. Holt,
Vice President

Mr. Jules D. Roberts
Mountain Fuel Supply Company
Salt Lake City, Utah

Dear Sir:

We have completed a fractional distillation (Podbielniak analysis) on each of the two gas samples received from the Mountain Fuel Supply Company September 2, 1937. Our results are as follows:

	Gas Sample from R. D. Murphy Well #2. Sample taken before gas enters separator	Gas Sample Taken from 10" line at Red Creek
Methane and lighter	96.6%	92.5%
Ethane and Ethylene	3.1	6.6
Propane and Heavier	0.3	0.9
	100.0%	100.0%
Specific Gravity	0.600	0.750

(Air= 1)

Yours truly,

//s// E. S. Holt

45

9-546-a
(August, 1932)

DEPARTMENT OF THE INTERIOR

Geological Survey
Laboratory - Midwest, Wyoming

INFORMATION TO BE FURNISHED WITH EACH SAMPLE OF GAS

Marks on container ..... Lab. No. 36-G-4 (Filled by Chemist)

SOURCE OF SAMPLE:

Field Clay Basin, Utah ..... Farm of (~~Permit~~) Lease S L C 045051-A (Serial Number)

Operator Ohio Oil Company Operator's Address Casper, Wyoming

Well No. Robt. D. Murphy 1/4 Sec. 21 T. 3 N. R. 24 E. M .....

Sample taken by ....?.... Date taken ....?....

If known, name of sand (or formation) from which this sample is produced Dakota
(If doubtful, so state)

Depth to top of sand..... Depth to bottom of sand .....

Depth well drilled ..... Present depth .....

Depths(if known) where water encountered.....

Depth at which water string is landed, cemented,mudded .....

METHOD OF SAMPLING:

Please place where sample was obtained (sump hole, lead line, flow tank, bailer, etc.)

.....

Method of production (flowing, pumping, air, etc.) . .....

Initial Production:	Present Production:
Barrels oil	Barrels Oil .....
Barrels Water	Barrels Water .....
Gas Volume	Gas Volume .....
Rock Pressure	Rock Pressure .....

REASON FOR ANALYSIS:

(1) Future reference .....
(2).....
(3) Correlation .....
(4) .....

NOTE: A sample for analysis is of no value unless accompanied by above information. Complete information on this form is to be attached to each sample container; otherwise sample will be disregarded. Be sure to seal or tightly cork all containers immediately after sampling and label all samples so that there will be no confusion.

Form 9-331a
(March 1942)

Budget Bureau No. 42-R358.1.
Approval expires 11-30-49.

(SUBMIT IN TRIPLICATE)

Land Office Salt Lake

Lease No. 045051-A

Unit

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			
Notice of Plugging Back Well	XX		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

R. D. Murphy Well #2 Rock Springs, Wyo. - March 10, 1939

Well No. 2 is located 1120 ft. from {N/S} line and 660 ft. from {E/W} line of sec. 21

NE¼ NE¼ Sec. 21 (¼ Sec. and Sec. No.) | 3 N. (Twp.) | 24 E. (Range) | (Meridian)

Clay Basin Field (Field) | Dagget County (County or Subdivision) | Utah (State or Territory)

The elevation of the derrick floor above sea level is 6485 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

In accordance with our "Notice of Intention to Plug Back" dated July 24, 1935, and approved by your Mr. R. D. Ferguson on July 27, 1935, this well was plugged back from 6799' to 5750' as shown in the following:

We pumped in 150 sacks of cement with drill pipe at 6799' and followed up with mud. We then pulled out 567' of drill pipe and pumped in 150 sacks of cement with drill pipe at 6232', then followed up with mud. We then pulled out 482' of drill pipe and circulated the surplus cement out of the hole. The cementing was done by Perkins Oil Well Cementing Company.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company MOUNTAIN FUEL SUPPLY COMPANY
Box 932
Address Rock Springs, Wyoming

Approved March 15, 1939
B. R. Murphy
District Engineer
305 Federal Building
Casper, Wyoming

By C. A. Heizler
Title Vice President

U. S. GOVERNMENT PRINTING OFFICE 16-6437-3

9-546-a
(August, 1932)

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY [illegible] CASPER DISTRICT

Laboratory - Midwest, Wyoming

INFORMATION TO BE FURNISHED WITH EACH SAMPLE OF GAS

Marks on container Well Description Lab. No. 10-C1 (Filled by Chemist)

SOURCE OF SAMPLE:

Field Clay Basin, ~~[illegible]~~ Utah Farm or {~~Permit~~ Lease Salt Lake City 01[illegible](a) (Serial Number)

Operator Mountain Fuel Supply Co. Operator's Address Rock Springs, Wyo.

Well No. 2 SE¼ NE, ¼ Sec. 21, T. 3 N, R. 24 E, M. S.L.M.

Sample taken by D. E. Murphy Date taken 6-27-39

If known, name of sand (or formation) from which this sample is produced Dakota
(If doubtful, so state)

Depth to top of sand 5627 Depth to bottom of sand 5744

Depth well drilled 6700 Present depth 5750

Depths (if known) where water encountered

Depth at which water string is landed, cemented, mudded

METHOD OF SAMPLING:

Place where sample was obtained (sump hole, lead line, flow tank, bailer, etc.)

Well head

Method of production (flowing, pumping, air, etc.) Flowing

Initial production:		Present production:	
Barrels Oil		Barrels Oil	
Barrels Water		Barrels Water	
Gas Volume		Gas Volume	15,000,000 (Approx.)
Rock Pressure		Producing ~~Rock~~ Pressure	1800#

REASON FOR ANALYSIS:

(1) Future reference:
(2) To complete analyses and C.P.M. test if there is sufficient gas.
(3) Correlation:
(4)

Note: A sample for analysis is of no value unless accompanied by above information Complete information on this form is to be attached to each sample container; otherwise sample will be disregarded. Be sure to seal or tightly cork all containers immediately after sampling and label all samples so that there will be no confusion.

GAS ANALYSES

Condition of sample ..... Laboratory No. 10-01

Analysis by J.C.Crawford at Midwest, Wyoming Date 7-8-30

ORSAT ANALYSIS

	Carbon dioxide (CO_2)	0.00%
	Oxygen (O_2)	0.27%
Total Hydrocarbons	Methane (CH_4) and Ethane (C_2H_6) and higher	99.36%
	Nitrogen (N_2) by difference	0.37%
	Specific Gravity (calculated)	0.561
	Specific Gravity (observed)	0.600
	Average "n"	1.053

Calculated Gross B. T. U. per cu. ft. at 60° F. and 15.025 lbs. per sq. in. pressure 1063

HYDROGEN SULPHIDE BY TUTWILER METHOD

Grains of hydrogen sulphide per 100 cu. ft. of gas at 60° F. and 15.025 lbs. per sq. in. .....

Percentage of hydrogen sulphide at 60° F. and 15.025 lbs. per sq. in. .....

HEATING VALUE BY SARGENT GAS CALORIMETER

B. T. U. per cu. ft. at 60° F. and 15.025 lbs. per sq. in. pressure as determined by Sargent gas calorimeter:

Gross .....

Net .....

Remarks and conclusions:

A dry gas; C.P.M. determination unnecessary.

F2

9-546-a
(August, 1932)

DEPARTMENT OF THE INTERIOR
Geological Survey SOUTHWEST CASPER DISTRICT

Laboratory - Midwest, Wyoming

INFORMATION TO BE FURNISHED WITH EACH SAMPLE OF GAS

Marks on container: Well description Lab. No. 40-G1
SOURCE OF SAMPLE:

Field: Clay Basin, Utah Lease Salt Lake City 045051(a)

Operator: Mountain Fuel Supply Co. Address: Rock Springs, Wyo.

Well No. 2 S NE¼ NE, ½ Sec. 21, T. 3 N, R. 24 E, M. S.L.M.

Sample taken by: B. H. Murphy Date Taken: 6-27-39

If known, name of sand (or formation(from which this sample is produced: Dakota

Depth to top of sand 5627 Depth to bottom of sand: 5744

Depth well drilled: 6790 Present depth: 5750

Depths (if known) where water encountered:

Depth at which water string is landed, cemented, mudded:

METHOD OF SAMPLING:

Place where sample was obtained: Well head

Method of production (flowing, pumping, air, etc.) : Flowing

Initial production:	Present production:
Barrels oil	Barrels Oil
Barrles Water	Barrels Water
Gas Volume	Gas Volume: 15,000,000 (Approx.)
Rock Pressure	Producing Pressure: 1800#

REASON FOR ANALYSIS:

(1) Future reference:
(2) To complete analyses and C.P.M. test if there is sufficient gas.
(3) Correlation:
(4)

Note: A sample for analysis is of no value unless accompanied by above information. Complete information on this form is to be attached to each sample container; otherwise sample will be disregarded. Be sure to seal or tightly cork all containers immediately after sampling and label all samples so that there will be no confusion.

GAS ANALYSES

Condition of sample: Laboratory No.: 40-G1

Analysis by J. G. Crawford at Midwest, Wyoming Date: 7-8-39

ORSAT ANALYSIS

	Carbon dioxide (CO_2)	0.00%
	Oxygen (O_2)	0.27%
Total Hydrocarbons	Methane (CH_4) and Ethane (C_2H_6 and higher	99.34%
	Nitrogen (N_2) by difference	0.39%
	Specific Gravity (calculated)	0.584
	Specific Gravity (observed)	0.600
	Average "n"- - - - - - - - - - - - - - - - -	1.053
	Calculated Gross B. T. U. per cu. ft. at 60° F. and 15.025 lbs. per sq. in. pressure	1063

HYDROGEN SULPHIDE BY TUTWILER METHOD

Grains of hydrogen sulphide per 100 cu. ft. of gas at 60° Ft. and 15.025 lbs. per sq. in. ~~xxxxxxxx~~

Percentage of hydrogen sulphide at 60° Ft. and 15.025 lbs. per sq. in.

HEATING VALUE BY SARGENT GAS CALORIMETER

B. T. U. per cu. ft. at 60°F. and 15.025 lbs. per sq. in. pressure as determined by Sartent Gas calorimeter:

Gross- - - - - -

Net- - - - - - -

Remarks and conclusions:

A dry gas; C.P.M. determination unnecessary.

24

DISTILLATE WELL TEST DATA

Customer Mt. Fuel Supply Co. | Lease R. D. Murphy | Well No. 2
Field Clay Basin, Utah | Total Depth 5838 | Sand Tested 3-9-44
Name of Sand Dakota | Depth of Sand 5827-60 | Sand Thickness
Sand Porosity | 5677-90 | Shut in Press.
Bottom Hole Press. | Bottom Hole Temp. 168°F | Orig. 2226#
Casing Size 8-5/8"(Liner 6-5/8") | Tubing Size 2½" | Pres. 1665#
Meter Run Size 6-5/8" O.D. | Orifice Size 2.000" | Sep. Calibration 15.15
Time of Sampling | Liquid Sample No. 11-14 | 15.15.
Tubing Choke 1-1/16" B.H.
Meter Conn. Flange
Gas Sample No. 12-13

Date Test Started 3-11-44 | Date Test Completed 3-12-44

Time	Well Flowing Temp.	Pressures Casing	Pressures Tubing	Separator Press.	Separator Temp.	Rate of Fluid Pr. Min.	Rate of Fluid Pr. Sec.	Gas Measurement Diff. L-10	Gas Measurement Press. L-10 1000# Sp.	Gas Measurement Temp. °F.	Water Make	Tank Gauge
3:45		1530#	1510#	505#				4.2	7.1	49		
4:15						34	50	4.2	7.15	49		
4:30								4.2	7.15	49.5		
4:45						34	25	4.2	7.15	49		
5:00								4.2	7.15	49		
5:15								4.2	7.15	49		
5:30(c)								4.2	7.17	49.5		
5:45								4.2	7.17	50		
6:00(b)						34	40					
6:15												
7:30PM									7.16	50		
7:45						39	0		7.15	49		
8:00								4.2	7.15	48		
8:15								4.2	7.15	48		
8:30(a)						32	05	4.2	7.15	48		
8:45								4.2	7.15	49		
9:00						28	30	4.2	7.15	50		
9:15								4.2	7.15	50.5		
9:30								4.2	7.15	51		
9:45(d)								4.2	7.15	52		
10:00								4.2	7.15	52		
10:15						34	0	4.2	7.15	52		

(a) Liquid Sample #11
(b) Gas Sample #12
(c) Gas Sample #13
(d) Liquid Sample #14

Water Tests: 10:37 P.M. to 9:10 A.M. Got 14.125 Gals. at 56° F.
9:10 A.M. to 11:43 A.M. Got 2.125 Gals. at 45° F.

Well Elevation: 6478'.

19

EDGAR E. SHAFER, Jr.

GAS RESEARCH AND ENGINEERING SERVICE

DISTILLATIONS
VAPOR PRESSURES

Laboratory: 5119 Kinsie Street
Los Angeles 22, California

TELEPHONE
ANGELUS 1-9726

March 26, 1944.

Mountain Fuel Supply Company,
Rock Springs, Wyoming. Attn. Mr.J.T.Simon

Gentlemen :

The following is a report on Fractional Analysis of :

SAMPLE OF ------ LIQUID from R.D.Murphy #2 separator, #11
SAMPLE TAKEN --- March 11, 1944. 49°F., 500 lbs.
DATE RECEIVED -- March 16, 1944.
REPORT NO.MW-L1
TEST NO.4144

ANALYSIS

Fraction	Percent by LIQUID VOLUME	MOL Percent
Methane & lighter	6.23	14.99
Ethane	2.44	4.16
Propane	2.96	4.38
Isobutane	1.47	1.83
n-Butane	3.26	4.20
Isopentane	3.11	3.45
n-Pentane	3.46	3.88
Hexanes-plus	77.07	63.11
TOTAL	100.00	100.00

Mol Weight of Hexanes-plus Residue		 117
Spec.Gravity " " "	@ 60°F	.....0.7487
Vapor Pressure " " "	@ 100°F	..... 2.0 Lbs.ABS.

Submitted,

Edgar E. Shafer Jr.

EDGAR E SHAFER JR

EDGAR E. SHAFER, Jr.

GAS RESEARCH AND ENGINEERING SERVICE

DISTILLATIONS
VAPOR PRESSURES

Laboratory: 5119 Kinsie Street
Los Angeles 22, California

TELEPHONE
ANGELUS 1-9726

March 26, 1944

Mountain Fuel Supply Company,
Rock Springs, Wyoming. Attn. Mr.J.T.Simon

Gentlemen :

The following is a report on Fractional Analysis of :

SAMPLE OF ------ #12 GAS from R.D.Murphy #2 separator
SAMPLE TAKEN --- March 11, 1944 49°F., 500 lbs.
DATE RECEIVED -- March 16, 1944.
REPORT NO.MW-N7
TEST NO.4145

ANALYSIS

Fraction	Percent by Volume	Liquid Content Gal.per MCF
Carbon Dioxide	0.10	
Methane & lighter*	93.26	
Ethane	4.17	
Propane	1.33	0.365
Isobutane	0.23	0.075
n-Butane	0.38	0.120
Isopentane	0.17	0.062
n-Pentane	0.17	0.062
Hexanes-plus	0.19	0.083
TOTAL	100.00	0.767

*Estimated Nitrogen content ... 3%

Submitted,
Edgar E. Shafer Jr.
EDGAR E SHAFER JR

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EDGAR E. SHAFER, Jr.

GAS RESEARCH AND ENGINEERING SERVICE

DISTILLATIONS
VAPOR PRESSURES

Laboratory: 5119 Kinsie Street
Los Angeles 22, California

TELEPHONE
ANGELUS 1-9726

March 26, 1944

Mountain Fuel Supply Company,
Rock Springs, Wyoming. Attn. Mr.J.T.Simon

Gentlemen :

The following is a report on Fractional Analysis of :

SAMPLE OF ------ #13, GAS from R.D.Murphy #2 separator
SAMPLE TAKEN --- March 11, 1944. 48°F., 500 lbs.
DATE RECEIVED -- March 16, 1944.
REPORT NO.MW-N8
TEST NO.4146

ANALYSIS

Fraction	Percent by Volume	Liquid Content Gal.per MCF
Carbon Dioxide	0.20	
Methane & lighter*	93.01	
Ethane	4.19	
Propane	1.32	0.362
Isobutane	0.27	0.088
n-Butane	0.50	0.158
Isopentane	0.16	0.059
n-Pentane	0.16	0.058
Hexanes-plus	0.19	0.083
TOTAL	100.00	0.808

Estimated Nitrogen content 2%

Submitted,

Edgar E. Shafer Jr.

EDGAR E SHAFER JR

17

EDGAR E. SHAFER, Jr.

GAS RESEARCH AND ENGINEERING SERVICE

DISTILLATIONS
VAPOR PRESSURES

Laboratory: 5119 Kinsie Street
Los Angeles 22, California

TELEPHONE
ANGELUS 1-9726

March 26, 1944

Mountain Fuel Supply Company,
Rock Springs, Wyoming. Attn. Mr.J.T.Simon

Gentlemen :

The following is a report on Fractional Analysis of :

SAMPLE OF ------ #14 LIQUID from R.D.Murphy #2 separator
SAMPLE TAKEN --- March 11, 1944 48°F., 500 lbs.
DATE RECEIVED -- March 16, 1944.
REPORT NO.MW-L2
TEST NO.4147

ANALYSIS

Fraction	Percent by LIQUID VOLUME	MOL Percent
Methane & lighter	6.77	16.01
Ethane	2.61	4.36
Propane	3.12	4.53
Isobutane	1.45	1.77
n-Butane	3.54	4.48
Isopentane	3.25	3.55
n-Pentane	3.47	3.82
Hexanes-plus	75.79	61.48
TOTAL	100.00	100.00

Mol Weight of Hexanes-plus residue 116
Spec.Gravity " " " @ 60°F 0.7483
Vapor Pressure " " " @ 100°F .... 1.8 lbs.Abs.

Submitted,
Edgar E. Shafer Jr.
EDGAR E SHAFER JR

CLI-13
PRAIRIE PUBLISHING CO.—36205

CHEMICAL & GEOLOGICAL LABORATORIES

521 South Center St. P. O. Box 279
Casper, Wyoming

CORE ANALYSIS REPORT

Field CLAY BASIN, UTAH Well No. R. D. Murphy #2
Operator Mountain Fuel Supply Company Location NE¼ NE¼ 21-3N-24E
Formation Depths 5634 - 5688 Lab. No. 1367
Analyzed by Chemical-Geological Laboratories Date April 20, 1948

SAMPLE NO.	DEPTH, FEET	EFFECTIVE POROSITY	PERMEABILITY, MILLIDARCIES		OIL SATURATION		WATER SATURATION	
			H	V	PERCENT PORE SPACE	BARRELS PER ACRE FEET	PERCENT PORE SPACE	BARRELS PER ACRE FEET
1	5634-52A	7.3	119	0				
2	5634-52B	18.5	46	23				
3	5634-52C	17.6	38	2.30				
4	5634-52D	16.9	66	35				
5	5634-52E	18.4	84	24				
6	5634-52F	2.2	0	0.01				
7	5634-52G	6.2	0	0.01				
8	5655-57A	5.7	0.01	0				
9	5655-57B	9.7	5.92	4.59				
10	5667-77A	10.6	0	0.01				
11	5667-77B	11.8	0	(a)				
12	5677-88A	11.2	0	0				
13	5677-88B	14.2	0	0.37				
14	5677-88C	15.9	0	0.05				
15	5677-88D	12.3	0	0.05				

NOTE: (a) indicates insufficient sample.

SUMMARY

[Arithmetical average, excluding sections with less than one-tenth millidarcy permeability]

DEPTH. FEET FROM	TO	FEET OF SAND	AVERAGE POROSITY	AVERAGE PERMEABILITY H	V	AVERAGE OIL SATURATION	AVERAGE WATER SATURATION
5634A	5652E		15.7	71	17		

DETAILS OF PLAN OF WORK

This well has been drilled to a total depth of 6790 feet.

The second bench of the Sundance sand was encountered at 6737 feet and drilling was stopped at 6790 feet in sand which showed water.

The first bench of the Sundance sand was encountered from 6621 to 6644 feet. This sand also showed water.

We encountered a sand in the Morrison formation from 6014 to 6030 feet which showed water.

From 5909 to 5918 feet we had a sand which showed a small amount of gas.

From 5808 to 5812 feet we had a sand with a small showing of gas.

From 5764 to 5766 feet we had a sand with a small showing of gas.

From 5724 to 5746 feet we had a sand with a good showing of gas.

From 5677 to 5692 we had a sand with a good showing of gas.

From 5627 to 5660 feet we had a sand which gauged 16,000,000 cu. ft. of gas.

We would like permission to plug this well back to 5750 feet with approximately 300 sacks of cement, then set perforated liner and produce from the three benches of Dakota sand, that is,

From 5627 to 5660
5677 to 5692
5724 to 5746

These three benches of sand combined gauged 34,000,000 cu. ft. of sweet gas. Our 8-5/8" casing is set and cemented with 632 sacks of cement at 5627 feet.

copy

Form No. 557
817-J

WELL RECORD

Salt Lake
#045051-A

Well No. 2 Farm A. D. Murphy Acres 640 Lease No. Utah 1-A

State Utah County Barrett Pool Clay Basin

Sec. 21 Survey Town 3 North Range 24 East

Location 1120 Ft. from North Line 660 Ft. from East Line

INITIAL PRODUCTION

Oil: 1st 24 144 Bls. ~~Mx~~ 61 Gr. With well flowing Bls. Flowing or Pumping

Gas: 32,000,000 C Test, Estimated Pressure 2220 Lbs.
13,000,000 thru tubing. 1150# back pressure on casing.

~~Non-productive (dry) or (water)~~

Date began producing

SANDS

Name	Frontier	Dakota	Dakota	Dakota	Morrison	Sundance
Depth to top	5328	5627	5677	5724	6009	6521-6643
" " botom	5344	5660	5690	5744	6037	6741-6799
Thickness	16	33	13	20		
Oil: Producing from						
to						
Showing or dry						
Gas: Producing from		5627	5677			
to		5660	5690			
Showing or dry	Show gas					
Water: from					6009	6521
to					6037	6643

RIG

126' Rotary

Began 7/17/34 Comp. 7/27/34 Style Derrick Cont'r A.B. Frix Rigging by Days at

DRILLING, ETC

Began 7/30/34 Comp. 8/9/35 Cont'r. Rocky Mtn.Drlg.Co. Contract: Briefly $9.00 per ft. to 6,000 ft. $400.00 per 24-hour day thereafter

Paid Drilling ft. at Amt. ft. at Amt.

" Cleaning out days at Amt. Labor ft. at Amt.

" Swabbing days at Amt. Total depth drilled 6799' Plugged to 5868'

FUEL

KIND	FROM	QUANTITY	PRICE	AMOUNT
Gas	A. D. Murphy #1	Unmetered		

WATER

FROM	QUANTITY	PRICE	AMOUNT
Water Plant at	Clay Basin		

TORPEDOES

By			
Date	Q'rts	from	to

PIPE IN WELL—COMPLETED

Size	15½	8-5/8"	6-5/8"	2"	2½"	3"	
Weight	70	32 & 36	26#	4.5	6.5	7.65	
Joints	10	229	9	1	195	1	
Feet	189'8"	5672'11"	249'9"	21'3"	5711'9"	21'3"	

Liner bottom 5868' Packers set at Wire Line

ACCOUNTING FOR PIPE

DEBITS						CREDITS					
MON.	TRF.	WHSE. OR FOREMAN	SIZE	WT.	FEET	MON.	TRF.	WHSE. OR FOREMAN	SIZE	WT.	FEET
		See attached list									

PIPE SIDETRACKED IN HOLE

Size										
Weight				None						
Joints										
Feet										
Depth										

TOOLS LOST IN HOLE

DESCRIPTION	DEPTH.	DAYS FISHING
None		

MISC. INFORMATION	
	APP. D. K. Bowen
	" C. R. Hetzler
	"
	EXAM.

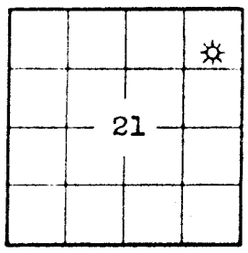
LOG

DESCRIPTION	DEPTH FROM	DEPTH TO	DEPTH Thickness	CAS'G	DESCRIPTION	DEPTH FROM	DEPTH TO	DEPTH Thickness	CAS'G
See attached log									

12

Field Clay Basin Utah County Duchesne Sec. 21 T. 3N R. 24E

Company Mountain Fuel Supply Co. Farm Robert D. Murphy Well No. 2



Location 1120' S of N Line; 660' W of E Line Elev. 6483'

I.P. Gas 32 M cu. ft R.P. 2220 # Oil Bbls.

Drilling Commenced July 30, 1934 Completed August 9, 1935

Drilled under contract to Total Depth 6799 ft.

Remarks: Mt. Fuel Supply Co. by Rocky Mt. Drilling Co.

Sands

Casing Record: 15 1/2" - 70# cemented @ 199' 10"; 8-5/8" - 32and 36# cemented @ 5626' 7"; 6-5/8" - 26# liner set with bottom @ 5868' and top 5620' 6"; string of 2 1/2" - 6.5# U.E. tubing installed with bottom hole choke and Hetzler ball bearing tubing head.

FORMATION RECORD

	From	To
Surface sand and brown shale	0	60
Shale and shells	60	130
Shale	130	140
Shale and shells	140	340
Shale	340	405
Shale and sandy shale	405	495
Shale	495	525
Shale and shells	525	740
Sandy shale	740	815
Shale and shells	815	970
Sandy shale	970	1070
Shale and shells	1070	1095
Sandy shale	1095	1230
Sand, shale and hard shells	1230	1300
Sand and shale	1300	1370
Hard sandy shale	1370	1415
Gray sandy shale	1415	1470
Hard sandy shale	1470	1515
Sandy shale	1515	1575
Gray sandy shale	1575	1645
Sandy shale	1645	1905
Sticky gray shale	1905	1955
Hard sandy shale	1955	1980
Sandy shale	1980	2035
Hard gray shale	2085	2205
Hard shale	2205	2230
Hard gray shale	2230	2265
Hard shale	2265	2300
Gray shale	2300	2340
Gray sandy shale	2340	2400
Gray shale	2400	2630
Shale	2630	2700
Gray shale	2700	2755
Sandy shale	2755	2770
Shale	2770	2785
Gray shale	2785	2845
Shale	2845	2900
Gray sandy shale	2900	2965
Shale	2965	3060
Gray sandy shale	3060	3110
Hard gray shale	3110	3165
Shale	3165	3210
Gray shale	3210	3315
Shale	3315	3360
Gray shale	3360	3420
Shale	3420	3535
Shale with Calcite stringers	3535	3605
Shale	3605	3875
Shale, gray	3875	3910
Shale	3910	4135
Gray shale	4135	4200
Hard shale	4200	4230
Shale	4230	4765
Shale and shells	4765	4805
Shale	4805	5065

FORMATION RECORD

	From	To
Shale and shells	5065	5090
Shale	5090	5115
Hard shell	5115	5119
Shale and shells	5119	5160
Shale	5160	5187
Shale and shells	5187	5200
Shale	5200	5261
Hard shells	5261	5292
Shells	5292	5294
Gray, sandy shale	5294	5297
Black shale	5297	5298
Gray and black sandy shale	5298	5304'6"
Gray sand with black shale streaks - No showing, FRONTIER	5304'6"	5309'6"
Gray shale	5309'6"	5310'6"
Gray sand, fine and hard, no showing	5310'6"	5311'6"
Black shale	5311'6"	5312'6"
Gray, sandy shale	5312'6"	5313'6"
Fine, gray, hard sand	5313'6"	5319
Gray, sandy shale	5319	5320
Hard, fine gray sand	5320	5321
Blue and gray shale	5321	5322
Hard, fine, gray sand	5322	5326
Gray, hard sand	5326	5327
Gray, sandy shale	5327	5328
Fine, gray, medium hard sand with thin coal streaks showing gas from top to bottom	5328	5344
Blue, sandy shale	5344	5345
Gray sand	5345	5346
Gray, sandy shale	5346	5349
Coal	5349	5349'6"
Gray, sandy shale	5349'6"	5350'6"
Fine, gray, medium Hard sand	5350'6"	5358
Black and gray shale	5358	5360
Hard, sandy shale	5360	5363
Hard, gray sandy shale	5363	5364
Hard sand	5364	5366
Hard, gray sandy shale	5366	5377
Hard, gray sand	5377	5382
Grayish, black shale	5382	5386
Fine, hard, gray sand	5386	5387'6"
Grayish, black shale	5387'6"	5400
Grayish, black shale	5400	5418
Black shale	5418	5424
Bentonite	5424	5425
Black shale	5425	5452
Bentonite	5452	5453
Grayish, black shale	5453	5454
Black shale with streaks of bentonite	5454	5456
Bentonite	5456	5459

Field Clay Basin Sec. 21 T. 31 34E

Farm Robert D. Murphy Well No. 2

Company Mountain Fuel Supply Company

FORMATION RECORD

	From	To
Very hard black shale	5459	5461
Hard shale	5461	5481
Hard, sandy shale	5481	5488
Hard shale	5488	5492
Shale	5492	5512
Shale and bentonite	5512	5524
Shale	5524	5573
Hard shale	5573	5579
Shale	5579	5610
Shell	5610	5613
Hard shell	5613	5615
Hard shale	5615	5616
Shale	5616	5625
Hard shell	5625	5627
DAKOTA SAND	5627	5660
Gray shale	5660	5663
Black shale	5663	5667
Hard, sandy shale	5667	5676
Sandy shale	5676	5677
Sand	5677	5690
Sharp, sandy shale	5690	5692
Hard shale	5692	5694
Bentonite	5694	5696
Grayish black shale	5696	5705
Gray shale	5705	5707
Shale	5707	5722
Hard shell	5722	5724
Soft sand	5724	5731
Coarse, soft sand	5731	5744
Broken sand & shale	5744	5746
Soft shale	5746	5749
Soft, gray shale	5749	5764
Gray shale	5764	5766
Hard, sandy shale	5766	5766'6"
Sandy shale	5766½	5768
Blue shale	5768	5788
Bluish gray shale	5788	5792
Gray shale	5792	5808'6"
Hard sand cap rock	5808½	5809
Sand	5809	5812
MORRISON SHALE	5812	5821
Shale	5821	5827
Brown shale	5827	5837
Variegated shale, hard	5837	5845
Shale	5845	5880
Hard shale	5880	5893
Shale	5893	5900
Hard shale & shells	5900	5909
Hard sand	5909	5912
Sand, very hard	5912	5916
Hard, shelly sand	5916	5917
Hard, red shale	5917	5918
Hard shells & shale	5918	5920
Hard shale	5920	5942
Shale, lime shells	5942	5961
Shale	5961	5991
Red shale	5991	5998
Shale, hard shell on top of Morrison sand	5998	6009
SAND	6009	6014
Sand	6014	6030
Hard sand - (Water)	6030	6037
Hard sandy shale	6037	6063
Shale	6063	6093
Sandy shale	6093	6101
Gray shale & shells	6101	6130
Gray shale	6130	6174
Variegated shale	6174	6203
Hard shale	6203	6210
Lime and shale	6210	6230

FORMATION RECORD

	From	To
Hard shale and lime shells	6230	6269
Shale, hard	6269	6287
Variegated shale	6287	6307
Hard shale, sand streaks	6307	6316
Variegated shale	6316	6416
Sandy shale - TWIN CREEK FORMATION	6416	6421
Lime and shale, (fossiliferous)	6421	6431
Dark gray shale	6431	6446
Greenish gray shale	6446	6478
Sandy shale	6478	6501
Lime, sandy	6501	6521
Sand, light gray, 1st SUNDANCE	6521	6643
Red shale	6643	6663
Hard, gray shale	6663	6716
Red shale	6716	6741
Light gray sand, 2nd SUNDANCE	6741	6799

5667
5387
280

CASING RECORD

R. D. Murphy Well No. 2
Clay Basin Field
Daggett County, Utah

15-1/2" - 70# - 10 Thread DBX Casing:

10 joints, 189'8" gross, 187'2" net, landed on casing clamps at 199'10" 12'8" below rotary table. Baker casing shoe used and spot welded. First four joints spot welded above and below collars. Cemented with 150 sacks of Ideal Portland Cement, last 50 sacks treated, by Perkins Oil Well Cementing Company on August 3rd, 1934.

8-5/8" - 32# & 36# - 8-Thd. & 10-Thd. Casing:

77 Jts.	2256'1" Gross,	2236' 5" Net,	8-5/8" -36# -8Thd.
152 Jts.	3416'10" "	3378'10" "	8-5/8" -32#-10Thd.
229 Jts.	5672'11" "	5615' 3" "	

Above casing API Seamless.

Cemented at a depth of 5626'7", 11'4" below the rotary table.

Baker Whirler Cement Float Shoe used on bottom. Baker Float Collar used two joints from bottom. Shoe joint was 8-5/8" - 32# - 10-Thread National API Seamless casing 31' long. Second joint was 8-5/8" - 36# - 8-Thread Youngstown API seamless casing 20'6" long, with 10-thread on bottom and 8-thread on top. Baker Float Collar was put on this joint. 79th joint was change joint from 8-thread to 10-thread, and was 8-5/8" - 32# casing 11'5" long. First 7 joints were spot welded above and below collars. Cemented with 632 sacks of Monolith Portland cement, last 100 sacks treated, by Perkins Oil Well Cementing Company on October 9, 1934.

6-5/8" - 26# - 10-Thread API Casing, Set as Liner:

9 joints, 249'9" gross, 247'6" net, set with the bottom at 5868' and the top at 5620'6". Liner set with left thread joint. Steel collar with left thread placed on top of liner and common collar, beveled with cutting torch, placed on bottom. Liner perforated from:

5620' 6"	to 5660'
5677'	to 5692'
724'	to 5746'.

2-1/2" - 6.5# - 10-Thread API Seamless Upset Tubing:

195 joints, 5711'9" gross, 5648'6" net, not including bottom hole choke, which consisted of 24'4" of pipe, were placed in well. The string of tubing, including the bottom hole choke, has a total net length of 5672'10" and was landed on Hetzler Ball Bearing Tubing Head - 2' above the rotary table. The bottom hole choke was perforated from 5669'10" to 5672'10". Choke was set off bottom due to sand in the well.

13

21'3" of 3" line pipe and 21'3" of 2" - 4.6# U.S. tubing used in making bottom hole choke.

ACCOUNTING FOR PIPE

R. D. Murphy Well #2
Sec. 21-3-24
Daggett County, Utah

Date	Trfr.	To or From	Debits	Credits	Balance
15-1/2" - 70# DBA Casing:					
8/25/34	12832	Wyo.-Calif. Pet. Co.	207'4"		
9/12/35	40438	M. F. Machine Shop		17' 8"	189' 8"
14" O.D. - 67.741# P.E. Line Pipe:					
9/24/34	37502	R. S. Whse	12' 0"		
9/12/35	40431	R. D. Murphy Farm		12' 0"	-
10-3/4" - 40.50# API Seamless Casing:					
10/31/34	35360	M. F. Machine Shop	12' 8"		
9/12/35	40433	R. D. Murphy Farm		12' 8"	-
8-5/8" - 32# & 36# API Casing:					
8/27/34	39681	W.H.Humphreys #2	1877' 9"		
8/27/34	39682	B.W.Musser Farm	972' 2"		
8/27/34	37499	R. S. Whse.	200' 4"		
8/27/34	37500	R. S. Whse.	452'3"		
8/27/34	37505	R.S.Whse. @ Hiawatha	239' 4"		
8/31/34	35254	M.F.Machine Shop	30' 7"		
8/31/34	35263	M.F.Machine Shop	120' 9"		
8/30/34	25148	Contl. Supply Co. (Remittance 5606)	2009' 1"		
9/16/34	25462	Natl. Supply Co. (Remittance 5685)	247' 0"		
10/31/34	35360	M. F. Machine Shop	6' 9"		
8/30/35	35680	M. F. Machine Shop	7' 0"		
9/12/35	40433	R. D. Murphy Farm		427' 2"	
9/12/35	40438	M. F. Machine Shop		62'11"	5672'11"
8-1/4" - 32# DBA Casing:					
8/27/34	37504	R.S.Whse. @ Hiawatha	29' 9"		
8/31/34	35263	M. F. Machine Shop	21' 3"		
9/12/35	40433	R. D. Murphy		34' 5"	
9/12/35	40438	M. F. Machine Shop		16' 7"	-
6-5/8" - 26# API Casing:					
7/31/34	24825	Ohio Oil Co.(Davis Farm)	45' 6"		
8/27/34	37501	R. S. Whse	2771' 9"		
10/30/34	37680	R. S. Whse	287' 3"		
7/30/35	38141	R. S. Whse.	14' 6"		
7/30/35	38142	R. S. Whse	117' 6"		
9/12/35	40432	R. D. Murphy Farm		45' 6"	
9/12/35	40433	R. D. Murphy Farm		2941' 3"	249' 9"
3" Line Pipe:					
7/26/35	1805	Colony Corp	21' 3"		21' 3"
2-1/2" - 6.5# - API Seamless Upset Tubing:					
10/24/34	298	Natl.Supply Co.	6063'10"		
9/12/35	40434	R.S. Whse. M.R. 610		347'10"	
9/12/35	40436	Parco Garage Co.		4' 3"	5711' 9"
2" Upset Tubing:					
7/30/35	38140	R. S. Whse	21' 3"		21' 3"

R. D. Murphy Well #2

CORE FORMATIONS

5294	- 5297	Gray sandy shale
5297	- 5298	Black shale
5298	- 5304' 6"	Gray and black sandy shale
5304' 6"	- 5309' 6"	Gray sand with black shale streaks (No showing)
5309' 6"	- 5310' 6"	Gray shale
5310' 6"	- 5311' 6"	Gray sand and hard (No showing)
5311' 6"	- 5312' 6"	Black shale
5312' 6"	- 5313' 6"	Gray sandy shale
5313' 6"	- 5319	Fine gray hard sand (No showing)
5319	- 5320	Gray sandy shale
5320	- 5321	Hard fine gray sand (No showing)
5321	- 5322	Blue & gray shale
5322 -	- 5326	Hard fine gray sand (No showing)
5326	- 5327	Gray hard sand (No showing) ——— ?
5327	- 5328	Gray sandy shale
5328	- 5344	Fine gray medium hard sand with thin coal streaks showing gas from top to bottom
5344	- 5345	Blue sandy shale
5345	- 5346	Gray sand (No gas showing)
5346	- 5349	Gray sandy shale
5349	- 5349' 6"	Coal
5349' 6"	- 5350' 6"	Gray sandy shale
5350' 6"	- 5353	Fine gray sand Medium hard (No gas showing)
5353	- 5357	Fine gray sand Medium hard (No gas showing)
5357	- 5358	Fine gray medium hard sand (No gas showing)
5358	- 5360	Black and gray shale
5360	- 5361	Gray sand, Hard
5361	- 5363	Hard sandy gray shale
5363	- 5364	Gray hard sandy shale
5364	- 5365	Hard sand
5366	- 5377	Hard gray sandy shale
5377	- 5382	Hard gray shale
5382	- 5383	Hard gray shale
5383	- 5385	Grayish black shale
5385	- 5386	Grayish black shale
5386	- 5387' 6"	Fine hard gray sand
5387' 6"	- 5397	Grayish black shale
5397	- 5400	Grayish black shale

R. D. Murphy #2.
1-23-24
Clay Basin.

FROM	TO	FORMATION
0	60	Surface Sand & Brown shale
60	140	Shale
140	340	Shale & Shells.
340	Set 187' 2" 15½"	10 thread casing. Cemented with 150 Sacks
340	405	Shale
405	495	Shale and sandy shale
495	525	Shale
525	740	Shale and shells
740	815	Sandy shale
815	970	Shale and shells
970	1070	Sandy shale
1070	1095	Shale and Shells
1095	1230	Sandy Shale
1230	1370	Sand and Shale
1370	1415	Hard Sandy Shale
1415	1470	Grey Sandy Shale
1470	1575	Hard Sandy Shale
1575	1645	Grey Sandy Shale
1645	1905	Sandy Shale
1905	1955	Grey Shale (Sticky)
1955	2035	Hard Sandy Shale
2035	2095	Hard Grey Shale
2095	2135	Hard Sandy Shale
2135	2205	Hard Grey Shale
2205	2230	Hard Shale
2230	2265	Hard Grey Shale
2265	2300	Hard Shale
2300	2560	Grey Shale
2560	2630	Grey Shale
2630	2700	Shale
2700	2755	Grey Shale
2755	2770	Sandy Shale
2770	2785	Shale
2785	2845	Grey Shale
2845	2900	Shale
2900	2965	Grey Shale
2965	3060	Shale
3060	3165	Grey Sandy Shale
3165	3210	Shale
3210	3315	Grey Shale
3315	3360	Shale
3360	3420	Grey Shale
3420	3535	Shale
3535	3605	Grey Shale with Calasite
3605	4080	Shale
4080	4100	Shale & shells
41000	4765	Shale
4765	4805	Shale & shells
4805	5065	Shale
5065	5160	Shale and shells
5160	5187	Shale
5187	5200	Shale and shells
5200	5261	Shells
5261	5292	Hard Shells
5292	5294	Shell
5294	5297	Grey Sandy Shale (Cored)
5297	5298	Black Shale "
5298	5304.6	Grey & Black Sandy Shale "
5304.6	5309.6	Grey Sand with black shale streaks (cored)
5309.6	5310.6	Grey shale "
5310.6	5311.6	Grey Sand, hard "
5311.6	5326	Grey Sand
5326	5344	Sand Gas Show
5344	5357	Hard Grey Shale (Cored)
5357	5382	Hard Grey Shale "
5382	5386	Greyish Black Shale
5386	5387.6	Hard Grey Sand "
5387.6	5387	Greyish Black Shale "

R. D. Murphy #2
Sec. 21-23-24
Clay Basin

FROM	TO		FORMATION	
5397	5424		Black Shale	(Cored)
5424	5425		Bentonite	"
5425	5440		Black Shale	"
5440	5444		Bentonite	"
5444	5452		Black Shale	"
5452	5453		Bentonite	"
5453	5454		Greyish Black Shale	"
5454	5456		Black Shale with streaks bentonite	(Cored)
5456	5459		Bentonite	"
5459	5461		Very hard Black Shale	"
5461	5481		Hard Shale	
5481	5488		Hard Sandy Shale	
5488	5512		Shale	(Cored)
5512	5524		Shale & Bentonite	"
5524	5610		Shale	
5610	5615		Shell	
5615	5616		Shale Hard	
5616	5657		Hard Sand (Run 5627' 8 5/8" casing at 5653')	
5657	5660		Grey Shale (652 sacks cement)	(Cored)
5660	5676		Grey Shale	"
5676	5677		Sandy Shale	"
5677	5692		Sand.	"
5692	5694		Hard Shale	"
5694	5696		Bentonite	"
5696	5707		Grey Shale	"
5707	5722		Shale	"
5722	5724		Hard Shell	"
5724	5744		Sand	"
5744	5746		Broken Sand & Shale.	"
5746	5764		Soft Grey Shale	"
5764	5766		Sand	"
5766	5766½		Hard Tight Sand	"
5766½	5777		Shale	"
5777	5800		Shale	"
5800	5808		Sandy Shale	"
5808	5812		Sand	"
5812	5821		Morrison Shale	"
5821	5857		Brown Shale	
5857	5845		Varigated Hard Shale	
5845	5900		Shale	
5900	5909		Hard Shale and shells	
5909	5916		Sand.	
5916	5918		Hard Sand	(Cored)
5918	5920		Hard Sand and Shale	"
5920	5929		Hard Shale	
5929	5942		Shale	
5942	5961		Shale and lime shells	
5961	5991		Shale	
5991	6009		Red Shale, Hard	
6009	6014		Sand, and shale	(Cored)
6014	6030		Sand, Gas Show water	"
6030			Bottom of hole.	

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR: Mountain Fuel Supply Company

3. ADDRESS OF OPERATOR: P. O. Box 1129, Rock Springs, Wyoming 82901

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1120' FNL, 660' FEL NE NE

5. LEASE DESIGNATION AND SERIAL NO.: SL - 045051-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: -

7. UNIT AGREEMENT NAME: Clay Basin Unit

8. FARM OR LEASE NAME: Unit Well

9. WELL NO.: 2

10. FIELD AND POOL, OR WILDCAT: Clay Basin

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: NE NE 21-3N-24E

12. COUNTY OR PARISH: Daggett

13. STATE: Utah

14. PERMIT NO.: -

15. ELEVATIONS (Show whether DF, RT, GR, etc.): DF 6485' GR 6478'

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐				
(Other) Pull liner, set casing			X	(Other)			

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

TD 6799', PBD 5868', producing from Dakota formation through perforated liner.

We would like to pull the liner, under ream open hole section to 5868', log, run approximately 5868' of 7", 26#, K-55 super flush joint casing and cement with a total of about 207 sacks of cement, perforate the Dakota zone with 2 holes per foot, run and set production packer, run 4-1/2"OD, 11.6#, K-55, tubing, then make a short production test.

APPROVED BY THE DIVISION OF
OIL, GAS, AND MINING
DATE: 9-27-76
BY: P. L. Driscoll

18. I hereby certify that the foregoing is true and correct

SIGNED J. A. Wyatt TITLE Manager, Drilling and Petroleum Engineering DATE Sept. 22, 1976

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.: SL - 045051-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: -

1. OIL WELL ☐ GAS WELL ☒ OTHER

JUN 27 1985

7. UNIT AGREEMENT NAME: Clay Basin Unit

2. NAME OF OPERATOR: Mountain Fuel Supply Company

DIVISION OF OIL & GAS & MINING

8. FARM OR LEASE NAME: Unit Well

3. ADDRESS OF OPERATOR: P. O. Box 1129, Rock Springs, Wyoming 82901

U.S. GEOLOGICAL SURVEY RECEIVED
OCT 28 1976
ROCK SPRINGS, WY M...

9. WELL NO.: 2

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1120' FNL, 660' FEL NE NE

10. FIELD AND POOL, OR WILDCAT: Clay Basin

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: NE NE 21-3N-24E

14. PERMIT NO.: 43-009-15126 FR-OK

15. ELEVATIONS (Show whether DF, RT, GR, etc.): KB 6493.50' GR 6478'

12. COUNTY OR PARISH: Daggett

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☒
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Pull liner & set casing			
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

TD 6799', PBD 5675', well shut in.

Rigged up work over unit on 9-8-76, milled on and recovered part of the liner, cleaned out to 5716', landed 5712.75' net, 5750.34' gross of 7"OD, 23#, K-55, Hydril super FJ casing at 5719.25' KBM and set with 176 sacks of cement. Cleaned out to 5675', perforated Dakota from 5614' to 5650' with 2 HPF jumbo jet shots per foot, landed FB-1 production packer at 5556', bottom at 5584.60' KBM, landed 4-1/2", 11.6#, K-55 tubing at 5575.83' KBM, swabbed hole dry, shut well in.

Final report.

10-28-76

18. I hereby certify that the foregoing is true and correct

SIGNED Original Signed R. G. MYERS TITLE Manager, Drilling and Petroleum Engineering DATE Oct. 27, 1976

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

BEST COPY AVAILABLE

Schematic - not drawn to scale

PRESENT STATUS of WELL

P12-55/995

Revised 10-22-76 / JJy.

CLAY BASIN FIELD

UNIT No 2

FORMERLY R.D. MURPHY #2

CASING RECORD

15½" 70# 10rnd DBX csg

10 Jts 189' 8" gross 187' 2" net landed on csg clamps @ 199' 10" or 12' 8" below RT Baker csg shoe used & spot welded. First 4 Jts spot welded above & below collars. Cm't w/150 sx Ideal Portland cmt. last 50 sx treated by Perkins Oil Well Cm't Co 8-5-34

8⅝" 32# + 36# 8rnd + 10 rnd csg

	Gross	Net
77 Jts 8⅝" 36# 8rnd	2256' 1"	2236' 5"
152 Jts 8⅝" 32# 10rnd	3416' 10"	3378' 10"
229 Jts	5672' 11"	5615' 3"

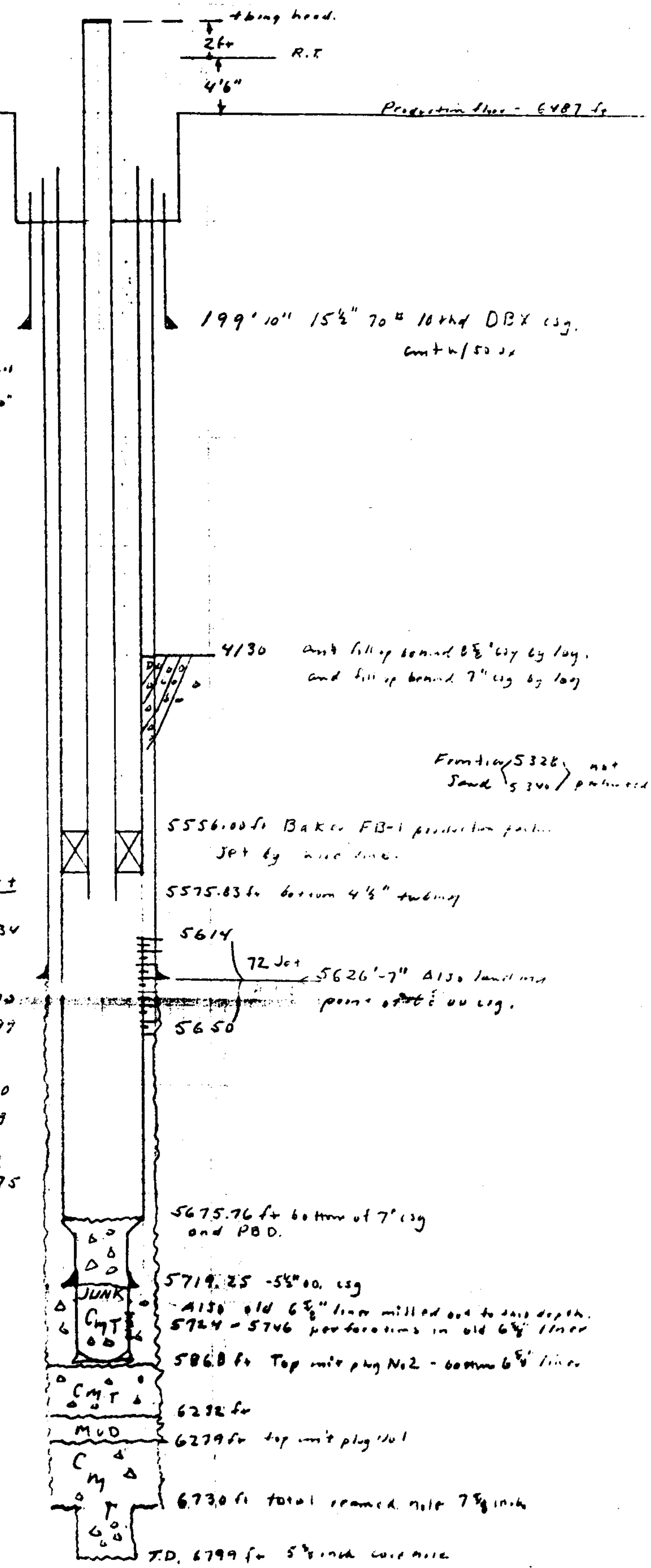
Above csg is API seamless - cm'ted at a depth of 5626' 7" or 11' 4" below R.T. Baker whirler cm't float shoe used on bottom Baker float collar used 2 Jts fm bottom shoe Jt was 8⅝" 32# 10rnd Nat'l API smls csg 31' long. Second Jt was 8⅝ 36# 8rnd Youngstown API smls csg 20' 6" long w/10rnd on bottom & 8rnd on top Baker float collar was put on this Jt 79th Jt was change to from 8rnd to 10rnd & was 8⅝" 32# csg 11' 5" long. First 7 Jts were spot welded above & below collars Cm't'd w/632 sx monolith Port' cm't last 135 sx treated by Perkins Oil Well Cm't Co 10-9-34

7" O.D. csg.-

	net
1-Pc 7" O.D 23# K-55 Hydril Super FJ csg	23.34
140 Jts 7" 23# K-55 Hydril csg	5645.90
1 - Baker float collar	1.97
1 7" Hydril flush joint to 5½" 8rd changeover	0.90
1 Jt 5½" 23# K-55 8rd LT&C csg	41.69
1 Baker guide shoe	0.90
	5712.75

Csg landed @ 5719.25 ft KBM or 6.50 ft below KB in a Nat'l 10"- 3000 psi csg flange w/full weight 115,000# on slips Cm't w/116 sx 50-50 Pozmix followed w/60 sx regular '6' treated. Bumped plug w/2500 psi - held good.

Note: 1 Jt 5½" on bottom



Please refer to attach sheet for tubing and packer details

Unit Well No. 2
Clay Basin Field
Status as of Recompletion
as a Gas Storage Well on
October 22, 1976

Picked up Baker FB-1 production packer on wireline and set at 5556.00 feet as follows:

	Net	Gross
1 Model FB-1 production packer with 4-inch bore dressed for 7-inch 23-pound casing, 5-inch 8 round thread, box down	2.67	2.67
1 5-inch millout extension, 5-inch 8 round thread pin by 5-inch Acme thread box	6.28	6.56
1 Seal bore protector, 5-inch Acme thread pin to pin	7.06	7.66
1 Changeover nipple, 5-inch Acme box by 3-1/2-inch 8 round pin	0.64	0.86
1 3-1/2-inch O.D., 9.30-pound, J-55, 8 round thread, EUE tubing pup	6.02	6.24
1 Model "F" non-ported seating nipple with bore 3.281 with 3-1/2-inch 8 round box and pin	1.03	1.25
1 3-1/2-inch O.D., 9.30-pound, J-55, 8 round thread tubing pup	4.05	4.27
1 Model "R" non-ported seating nipple with bore 2.75 with 3-1/2-inch 8 round box and pin	0.85	1.10
Total	28.60	30.61

Unit Well No. 2
Clay Basin Field
Status as of Recompletion
as a Gas Storage Well on
October 22, 1976

Ran 4-1/2-inch O.D. tubing as follows:

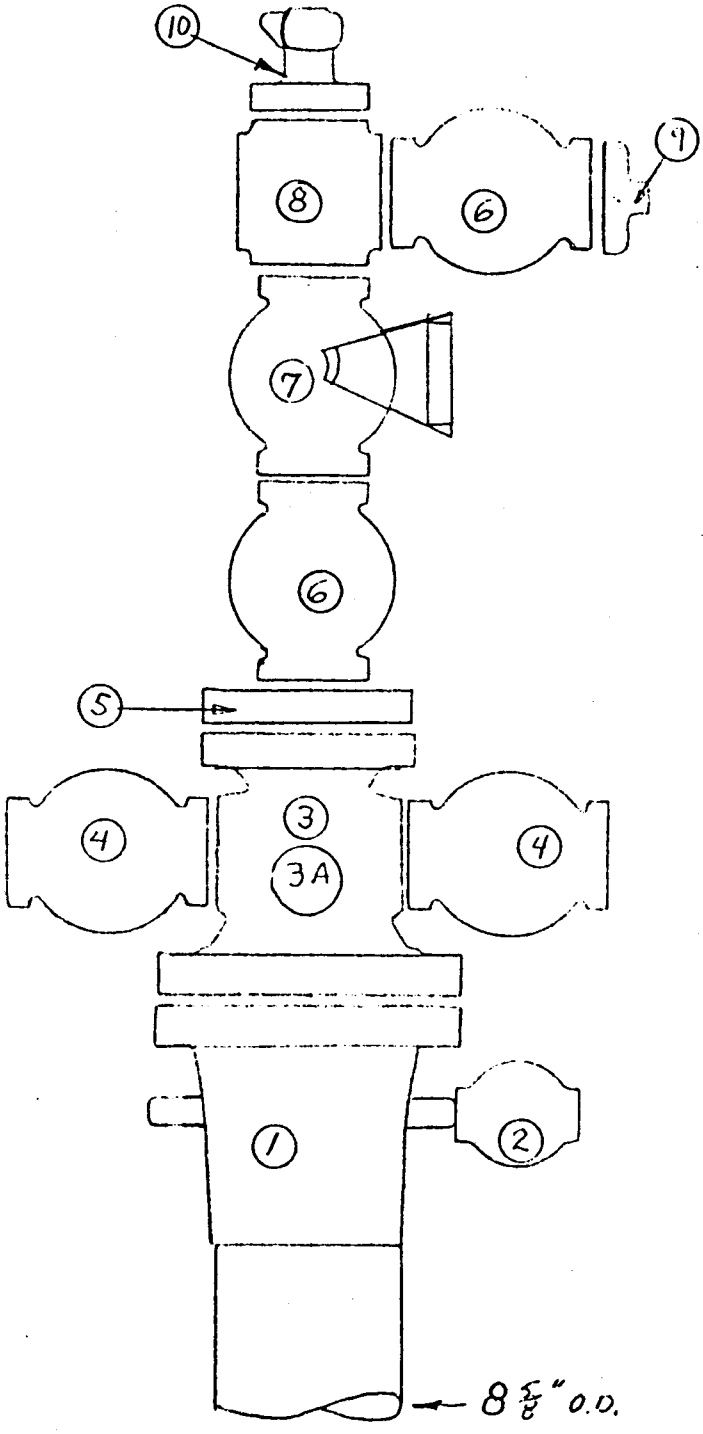
	Net	Gross
1 NSCo. tubing hanger tapped 4-1/2-inch 8 round thread, top and bottom	0.72	0.72
1 4-1/2-inch O.D., 11.60-pound, K-55, 8 round thread, LT&C pup	2.17	2.41
1 4-1/2-inch O.D., 11.60-pound, K-55, 8 round thread, LT&C pup	4.13	4.37
1 4-1/2-inch O.D., 11.60-pound, K-55, 8 round thread, LT&C pup	5.75	5.99
134 jts. 4-1/2-inch O.D., 11.60-pound, K-55, 8 round thread, LT&C casing	5541.44	5575.20
1 Baker 4-1/2-inch sliding sleeve box-pin, sleeve open	3.70	3.94
1 4-1/2-inch O.D., 11.60-pound, K-55, 8 round thread, LT&C pup	6.02	6.26
1 Baker Model "G" locator seal assembly with 9 extra seal units	7.40	7.40
Total	5571.33	5606.29

Stung into Baker FB-1 production packer. Above tubing landed at 5575.83 feet KBM or 4.50 feet below KB on a NSCo. 6-inch 3000 psi tubing spool on a DP4-H-1 tubing hanger in 10,000 pounds compression.

Present Status of Wellhead

Clay Basin Unit No. 2

after recompletion as a gas storage well 10-22-76



(1) 10" X 3000 psi casing flange, Type B slip-weld for 8-5/8"
(2) 1 - 2" Demco ball valve with 2" X 6" HD nipple and 2" XH bull plug
(3) 1 - NSCo. DP-70 tubing spool, 6" X 3000 psi by 10" X 3000 psi
(4) 2 - 2" X 3000 psi WKM gate valve flanged
(5) 1 - 6" - 3000 psi X 4" - 3000 psi double studded adapter
(6) 2 - 4" X 3000 psi WKM gate valve flanged
(7) 1 - 4" X 3000 psi WKM gate valve flanged, equipped with safety actuator
(8) 1 - studded block tee 4" X 4" X 4" - 3000 psi
(9) 1 - weld flange 4" - 3000 psi by schedule 80 weld
(10) 1 - tree top adapter 4" - 3000 psi flanged bottom, with 4-1/2" 8 round EUE lift threads
(3A) 1 - NSCo. tubing hanger, Type DP 4 H-1 tapped 4-1/2" 8 round ST&C

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.: SL - 045051-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: -

7. UNIT AGREEMENT NAME: Clay Basin Unit

8. FARM OR LEASE NAME: Unit Well

9. WELL NO.: 2

10. FIELD AND POOL, OR WILDCAT: Clay Basin

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: NE NE 21-3N-24E

12. COUNTY OR PARISH: Daggett

13. STATE: Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR: Mountain Fuel Supply Company

3. ADDRESS OF OPERATOR: P. O. Box 1129, Rock Springs, Wyoming 82901

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1120' FNL, 660' FEL NE NE

14. PERMIT NO.: -

15. ELEVATIONS (Show whether DF, RT, GR, etc.): KB 6493.50' GR 6478'

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Pull liner & set casing			☒
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

TD 6799', PBD 5675', well shut in.

Rigged up work over unit on 9-8-76, milled on and recovered part of the liner, cleaned out to 5716', landed 5712.75' net, 5750.34' gross of 7"OD, 23#, K-55, Hydril super FJ casing at 5719.25' KBM and set with 176 sacks of cement. Cleaned out to 5675', perforated Dakota from 5614' to 5650' with 2 HPF jumbo jet shots per foot, landed FB-1 production packer at 5556', bottom at 5584.60' KBM, landed 4-1/2", 11.6#, K-55 tubing at 5575.83' KBM, swabbed hole dry, shut well in.

Final report.

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE Manager, Drilling and Petroleum Engineering DATE Oct. 27, 1976

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

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1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR
Mountain Fuel Supply Company

3. ADDRESS OF OPERATOR
P. O. Box 1129, Rock Springs, Wyoming 82901

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
1120' FNL, 660' FEL NE NE

5. LEASE DESIGNATION AND SERIAL NO.
SL - 045051-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
-

7. UNIT AGREEMENT NAME
Clay Basin Unit

8. FARM OR LEASE NAME
Unit Well

9. WELL NO.
2

10. FIELD AND POOL, OR WILDCAT
Clay Basin

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
NE NE 21-3N-24E

12. COUNTY OR PARISH
Daggett

13. STATE
Utah

14. PERMIT NO.
-

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
KB 6493.50' GR 6478'

U.S. GEOLOGICAL SURVEY ... 1976

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Pull liner & set casing			X
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

TD 6799', PBD 5675', well shut in.

Rigged up work over unit on 9-8-76, milled on and recovered part of the liner, cleaned out to 5716', landed 5712.75' net, 5750.34' gross of 7"OD, 23#, K-55, Hydril super FJ casing at 5719.25' KBM and set with 176 sacks of cement. Cleaned out to 5675', perforated Dakota from 5614' to 5650' with 2 HPF jumbo jet shots per foot, landed FB-1 production packer at 5556', bottom at 5584.60' KBM, landed 4-1/2", 11.6#, K-55 tubing at 5575.83' KBM, swabbed hole dry, shut well in.

Final report.

10-25-76

MAY 1985

18. I hereby certify that the foregoing is true and correct

SIGNED Original Signed R. G. MYERS TITLE Manager, Drilling and Petroleum Engineering DATE Oct. 27, 1976

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

April 15, 1985

Bureau of Land Management
170 South 500 East
Vernal, Utah 84078

Attention: Benna

Gentlemen:

Re: Clay Basin Units #2, #3, #4, #5, #6, #10, and #11

Benna, we are unable to reach a decision regarding the status of the above mentioned wells. Wexpro states they are Gas Storage Wells and that they sent sundry's to that affect.

Reviewing our files, I am unable to locate any sundry's or any other information indicating that these are Gas Storage Wells. Perhaps Wexpro sent copies to you and not to us. Can you shed any light on the subject?

Any help you could provide us would be greatly appreciated.

Sincerely,

Vicky Carney
Office Specialist, Production

cc: Dianne R. Nielson
Ronald J. Firth
Norman C. Stout
File

0031-53

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
VERNAL DISTRICT OFFICE
170 South 500 East
Vernal, Utah 84078

IN REPLY
REFER TO:
3100
Clay Basin Unit

April 30, 1985

Mountain Fuel Supply Co.
P.O. Box 11368
Salt Lake City, UT 84139

Re: Well No. 2
Sec. 21, T3N, R24E, SLB&M
Lease SLC-045051-A

Well No. 3
Sec. 16, T3N, R24E, SLB&M
State Lease

Well No. 4
Sec. 27, T3N, R24E, SLB&M
Lease SLC-045053-A

Well No. 5
Sec. 20, T3N, R24E, SLB&M
Fee Lease

Well No. 6
Sec. 23, T3N, R24E, SLB&M
Lease SLC-045051-B

Well No. 10
Sec. 23, T3N, R24E, SLB&M
Lease SLC-045049

Well No. 11
Sec. 22, T3N, R24E, SLB&M
Lease SLC-045051-A

All in Clay Basin Unit.
All in Daggett County, Utah.

Gentlemen:

The aforementioned wells were originally completed as gas wells producing from the Dakata Formation. However, plan of developments/subsequent reports submitted for the Clay Basin Unit for calendar years 1977 through 1983 indicate that these wells are being converted to gas injection wells. If conversion has occurred, please submit sundry notices with subsurface schematics depicting the current status for each well. If alterations occurred to the casing while conversion was taking place, please submit Well Completion and Recompletion Report and Log for those wells affected, along with the aforementioned sundry notices.

Thank you for your cooperation in this matter. If you have any questions, please contact Allen McKee at (801) 789-1362.

Sincerely,

Craig M. Hansen
Assistant District Manager
for Minerals

CELSIUS ENERGY COMPANY

P.O. BOX 458 • ROCK SPRINGS, WYOMING 82901 • PHONE (307) 382-9791

May 8, 1985

Bureau of Land Management
Vernal District Office
170 South 500 East
Vernal, Utah 84078

Re:

Well No. 2 Sec. 21, T3N, R24E, SLB&M Lease SLC-045051-A	Well No. 6 Sec. 23, T3N, R24E, SLB&M Lease SLC-045051-B
Well No. 3 Sec. 16, T3N, R24E, SLB&M State Lease	Well No. 10 Sec. 23, T3N, R24E, SLB&M Lease SLC-045049
Well No. 4 Sec. 27, T3N, R24E, SLB&M Lease SLC-045053-A	Well No. 11 Sec. 22, T3N, R24E, SLB&M Lease SLC-045051-A
Well No. 5 Sec. 20, T3N, R24E, SLB&M Fee Lease	All in Clay Basin Unit. All in Daggett County, Utah

Dear Mr. McKee:

In reference to your letter 3100 on Clay Basin Unit, the above wells in question have all been converted to gas injection/withdrawal wells. This work was performed in 1976. Attached are sundries for wells that were reperforated in the Dakota along with schematics depicting each wells current status.

Thank you for bringing this matter to our attention. If you have any further questions, please contact me at 307-382-9791.

Sincerely,

Robert L. Rasmussen

Robert L. Rasmussen
Staff Engineer

RLR/srl

Attachments

CELSIUS ENERGY COMPANY

P.O. BOX 458 • ROCK SPRINGS, WYOMING 82901 • PHONE (307) 382-9791

June 25, 1985

State of Utah Natural Resources
Oil, Gas and Mining
355 W N Temple, Suite 350
Salt Lake City, Utah 84180-1203

Re: **Well No. 2**
Sec. 21, T3N, R24E, SLB&M
Lease SLC-045051-A

Well No. 3
Sec. 16, T3N, R24E, SLB&M
State Lease

Well No. 4
Sec. 27, T3N, R24E, SLB&M
Lease SLC-045053-A

Well No. 5
Sec. 20, T3N, R24E, SLB&M
Fee Lease

Well No. 6
Sec. 23, T3N, R24E, SLB&M
Lease SLC-045051-B

Well No. 10
Sec. 23, T3N, R24E, SLB&M
Lease SLC-045049

Well No. 11
Sec. 22, T3N, R24E, SLB&M
Lease SLC-045051-A

All in Clay Basin Unit.
All in Daggett County, Utah

Dear Ms. Poulsen:

In reference to your letter on the Clay Basin Unit, the above wells in question have all been converted to gas injection/withdrawal wells. This work was performed in 1976. Attached are sundries for wells that were reperforated in the Dakota along with schematics depicting each wells current status.

Thank you for bringing this matter to our attention. If you have any further questions, please contact me at 307-382-9791.

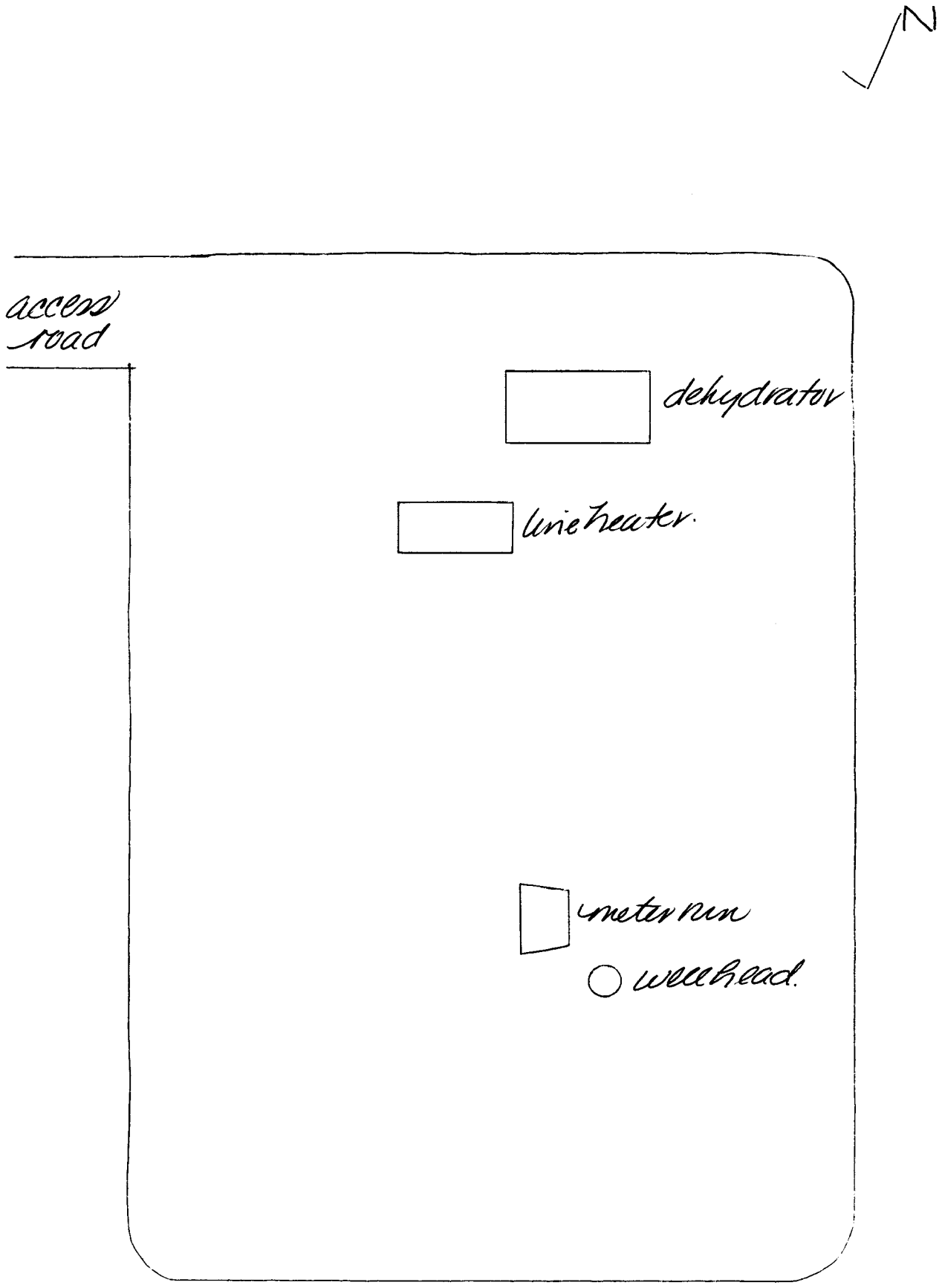
Sincerely,

Robert L. Rasmussen
Staff Engineer

RLR/srl

Attachments

Clay Basin Unit #3	Sec 21, 3N, 24E	Uintah Co. Utah 14 June 88



QUESTAR PIPELINE COMPANY

79 SOUTH STATE STREET • P. O. BOX 11450 • SALT LAKE CITY, UTAH 84147 • PHONE (801) 530-2400

June 23, 1988

CERTIFIED MAIL
RETURNED RECEIPT REQUESTED
#P 879 571 459

Bureau of Land Management
Utah State Office
CFS Financial Center
324 S. State Street
Salt Lake City, UT 84111-2303

Re: Name Change
Mountain Fuel Resources, Inc.
to Questar Pipeline Company

Gentlemen:

Enclosed for your files and information is a certified copy of the Articles of Amendment to the Articles of Incorporation of Mountain Fuel Resources, Inc. dated March 7, 1988, indicating that Mountain Fuel Resources, Inc. changed its name to Questar Pipeline Company.

Questar Pipeline Company holds interests in the following Federal Oil and Gas Leases in Utah:

No wells on grnd held w/in CA - U-9712-A - Questar Energy Co. 100%
CA well - RT & OR's Mtn. Fuel Resources - U-011246 RT Asgmnt pending to "Questar Energy Co"
SLC-045051(A) > OR'S
SLC-045051(B)
SLC-045053(A) > OR'S
SLC-045053(B)
SLC-062508 - OR'S
SLC-070555 - OR'S
SLC-070555(A) - OR'S
? Agreement No. 14-08-0001-16009
(Clay Basin Gas Storage Agreement) Vernal

Please note and adjust your records in accordance with the above and furnish verification of your receipt of this notice to the undersigned.

Sincerely,

J. B. Neese
Senior Landman

JBN/sdg

Enclosure

Form OGC-1b

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER Gas Storage Well

2. NAME OF OPERATOR: Questar Pipeline Company

3. ADDRESS OF OPERATOR: P.O. Box 11450, Salt Lake City, Utah 84147

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1120' FNL, 660' FEL NE NE

5. LEASE DESIGNATION AND SERIAL NO.: SL - 045051-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: Clay Basin Unit

8. FARM OR LEASE NAME: Unit Well

9. WELL NO.: 2

10. FIELD AND POOL, OR WILDCAT: Clay Basin

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: NE NE 21-3N-24E

14. PERMIT NO.: 43-009-15626

15. ELEVATIONS (Show whether DF, RT, GR, etc.): KB 6493.50' GR 6478'

12. COUNTY OR PARISH: Daggett

13. STATE: Utah

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			☐
(Other) Run chemical injection mandrel.	☐			(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

The purpose of the workover is to run chemical injection valve with 1/4" control line to make continuous methanol injection possible during withdrawal. The program consists of the following:

1. Set plug in "R" nipple.
2. Circulate hole with $CaCl_2$ water.
3. Pull the 4 1/2" tubing with seal assembly.
4. Rerun tubing with chemical injection mandrel and 1/4" control line.
5. Remove the water from the hole.
6. Pull plug.

This workover is planned to be carried out in August, September or October of 1993.

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 6-21-93
BY: [signature]

RECEIVED
JUN 18 1993
DIVISION OF OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE Staff Petroleum Engineer DATE June 17, 1993

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

QUESTAR PIPELINE COMPANY

79 SOUTH STATE STREET • P.O. BOX 11450 • SALT LAKE CITY, UTAH 84147 • PHONE (801) 530-2400 • FAX (801) 530-2570

November 18, 1993

State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

Dear Gentlemen:

Please find attached "Sundry Notices" for seven wells in Clay Basin. The workover in these wells was started on August 30, 1993 and completed on October 27, 1993.

If you have any questions, please call me at (801) 530-2006.

Sincerely,

Zoltan Bessenyei
Staff Petroleum Engineer

ZB:dc
RE3007

Form 3160-5
(November 1983)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.: SL - 045051-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER Gas Storage Well

7. UNIT AGREEMENT NAME: Clay Basin Unit

2. NAME OF OPERATOR: Questar Pipeline Company

8. FARM OR LEASE NAME: Unit Well

3. ADDRESS OF OPERATOR: P.O. Box 11450, Salt Lake City, UT 84147

9. WELL NO.: 2

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1120' FNL, 660' FEL NE NE

10. FIELD AND POOL, OR WILDCAT: Clay Basin

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: NE NE 21-3N-24E

14. PERMIT NO.: 43-009-15626

15. ELEVATIONS (Show whether DF, RT, GR, etc.): KB 6493.50' GR 6478'

12. COUNTY OR PARISH: Daggett

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Ran chemical injection mandrel			☐
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The purpose of the workover was to run chemical injection valve with 1/4" control line to make continuous methanol injection possible during withdrawal. The program consisted of the following:

1. Set plug in "R" nipple.
2. Circulated hole with $CaCl_2$ water.
3. Pulled the 4 1/2" tubing with seal assembly.
4. Ran pipe analysis log.
5. Rerun tubing with chemical injection mandrel and 1/4" control line.
6. Removed the water from the hole.
7. Pulled plug.

This workover was carried out in September of 1993.

NOV 22 1993

DIVISION OF OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED _____ TITLE Staff Petroleum Engineer DATE November 17, 1993

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING
1. GLH
2. CDW
3. FILE

Change of Operator (Well Sold) — Designation of Agent/Operator

X Operator Name Change — Merger

The operator of the well(s) listed below has changed, effective: **3/7/1988**

FROM: (Old Operator):	**TO:** (New Operator):
N1070-Wexpro Company PO Box 45360 Salt Lake City, UT 84145-0360 Phone: 1-(801) 534-5267	N7560-Questar Pipeline Company PO Box 11450 Salt Lake City, UT 84147 Phone: 1-(801) 530-2019

CA No. **Unit:**

WELL(S)

NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
COALVILLE GAS STORAGE 8	10	020N	050E	4304330192	99990	Fee	GS	A
COALVILLE GAS STORAGE 9	10	020N	050E	4304330193	99990	Fee	GS	A
COALVILLE GAS STORAGE 10	10	020N	050E	4304330244	99990	Fee	GS	A
COALVILLE GAS STORAGE 12	09	020N	050E	4304330249	99990	Fee	GS	A
CLAY BASIN UNIT 5	20	030N	240E	4300915629	1025	Fee	GS	A
CLAY BASIN UNIT 3	16	030N	240E	4300915627	1025	State	GS	A
CLAY BASIN UNIT 27-S	16	030N	240E	4300930018	1025	State	GS	A
CLAY BASIN UNIT 52-S	16	030N	240E	4300930048	1025	State	GS	A
CLAY BASIN UNIT 53-S	16	030N	240E	4300930049	1025	State	GS	A
CLAY BASIN UNIT 59-S	16	030N	240E	4300930055	1025	State	GS	A
CLAY BASIN UNIT 35-S	17	030N	240E	4300930026	1025	Federal	GS	A
CLAY BASIN UNIT 40-S	20	030N	240E	4300930031	1025	Federal	GS	A
CLAY BASIN UNIT 49-S	20	030N	240E	4300930045	1025	Federal	GS	A
CLAY BASIN UNIT 2	21	030N	240E	4300915626	1025	Federal	GS	A
CLAY BASIN 24-S	21	030N	240E	4300930015	1025	Federal	GS	A
CLAY BASIN UNIT 25-S	21	030N	240E	4300930016	1025	Federal	GS	A
CLAY BASIN UNIT 26-S	21	030N	240E	4300930017	1025	Federal	GS	A
CLAY BASIN 30-S	21	030N	240E	4300930019	1025	Federal	GS	A
CLAY BASIN UNIT 33-S	21	030N	240E	4300930024	1025	Federal	GS	A

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 1/13/2004
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 1/13/2004
3. The new company was checked on the **Department of Commerce, Division of Corporations Database on:** 1/14/2004
4. Is the new operator registered in the State of Utah: YES Business Number: 649172-0142
5. If **NO**, the operator was contacted contacted on: ____

NEW ENTITY NUMBERS ASSIGNED FEBRUARY 2004

ACCT	OPERATOR NAME	API NUM.	Sec	Twnshp	Rng	WELL NAME	ENTITY	EFF DATE	REASON
N7560	Questar Pipeline Co	4300915629	20	030N	240E	Clay Basin Unit 5	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300915627	16	030N	240E	Clay Basin Unit 3	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930018	16	030N	240E	Clay Basin Unit 27-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930048	16	030N	240E	Clay Basin Unit 52-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930049	16	030N	240E	Clay Basin Unit 53-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930055	16	030N	240E	Clay Basin Unit 59-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930026	17	030N	240E	Clay Basin Unit 35-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930031	20	030N	240E	Clay Basin Unit 40-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930045	20	030N	240E	Clay Basin Unit 49-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300915626	21	030N	240E	Clay Basin Unit 2	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930015	21	030N	240E	Clay Basin 24-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930016	21	030N	240E	Clay Basin Unit 25-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930017	21	030N	240E	Clay Basin Unit 26-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930019	21	030N	240E	Clay Basin 30-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930024	21	030N	240E	Clay Basin Unit 33-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930030	21	030N	240E	Clay Basin Unit 39-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930044	21	030N	240E	Clay Basin Unit 48-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930046	21	030N	240E	Clay Basin Unit 50-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930047	21	030N	240E	Clay Basin Unit 51-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930054	21	030N	240E	Clay Basin Unit 58-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930056	21	030N	240E	Clay Basin Unit 60-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300915635	22	030N	240E	Clay Basin U 11 (RD Murphy	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930021	22	030N	240E	Clay Basin 28-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930023	22	030N	240E	Clay Basin Unit 32-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage
N7560	Questar Pipeline Co	4300930027	22	030N	240E	Clay Basin Unit 36-S	1025 to 14040	2/10/2004	Clay Basin Gas Storage

Note to file: These entity numbers were changed to compliment the operator correction from 3/7/98

3100
U-09712-A
et al
(U-942)
C. Seare
3/9/89

DECISION

Questar Pipeline Company	:	Oil and Gas Leases
P.O. Box 11450	:	U-09712-A et al
Salt Lake City, Utah 84147	:	

Corporate Name Change Recognized

Acceptable evidence has been received establishing that Mountain Fuel Resources, Inc. has changed their name to Questar Pipeline Company. Accordingly, the surviving company, Questar Pipeline Company, is recognized as holding all interests in Federal oil and gas leases which were held by Mountain Fuel Resources, Inc. We are changing our records with respect to the attached listing of oil and gas leases. If there are any other leases that will be affected, please contact this office.

/s/ M. Willis
ACTING Chief, Minerals
Adjudication Section

Enclosure
List of Leases

cc: All District Offices, Utah
MMS, AFS
MMS, BRASS
920, Teresa Thompson
Clay Basin Unit File

CSeare:sl 3/9/89:1642f

List of Leases

Overriding Royalties

U-09712-A
U-011246

Operating Rights

SL-045051-A & B
SL-045053-A & B
SL-062508
SL-070555
SL-070555-A
SL-045049-A & B

Clay Basin Gas Storage Agreement
Agreement No. 14-08-0001-16009

FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER:
SL-045051A

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:
CLAY BASIN GAS STORAGE

1. TYPE OF WELL
Gas Storage Well

8. WELL NAME and NUMBER:
CLAY BASIN UNIT 2

2. NAME OF OPERATOR:
QUESTAR PIPELINE COMPANY

9. API NUMBER:
43009156260000

3. ADDRESS OF OPERATOR:
P.O.Box 45360 , Salt Lake city , UT, 84145

PHONE NUMBER:
801 324-5061 Ext

9. FIELD and POOL or WILDCAT:
CLAY BASIN

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1120 FNL 0660 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NENE Section: 21 Township: 03.0N Range: 24.0E Meridian: S

COUNTY:
DAGGETT

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

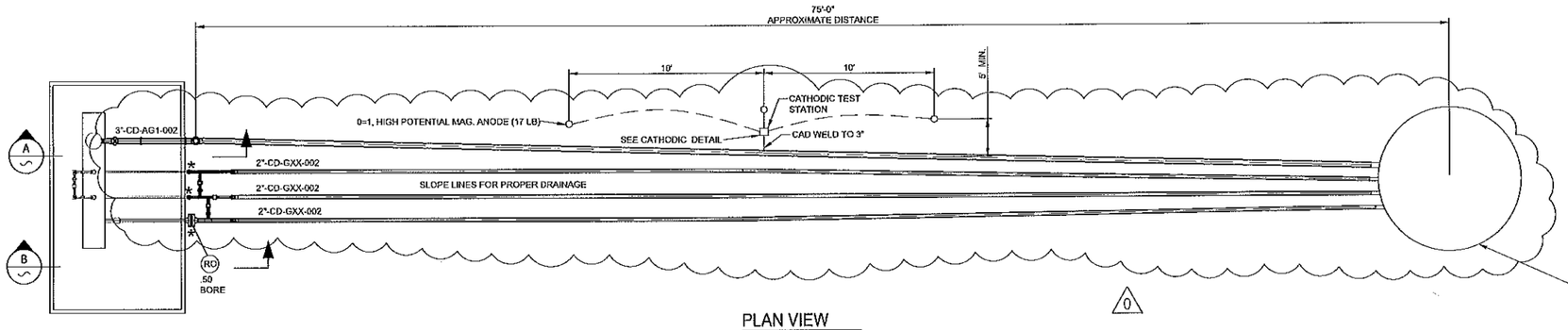
TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 5/9/2016	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ SPUD REPORT Date of Spud:	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	✓ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER: Install Dehy Tank

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Questar Pipeline Company proposes to install a Dehy Reflux Tank at the same location of the existing Dehy pond on Well #2 in Clay Basin. The tank is to be buried and is a double-wall metal reflux tank and will have a containment capacity of 80 bbl. Tank dimensions and drawings are attached. The work will include installing the buried tank, and installing three 2" diameter liquid dump lines and one 3" diameter reflux line and associated valves and fittings from the Dehy units at the well. Ground disturbance will be confined to previously disturbed areas as shown on attached photos. All work will occur within the existing Questar Pipeline leased area.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
July 19, 2016

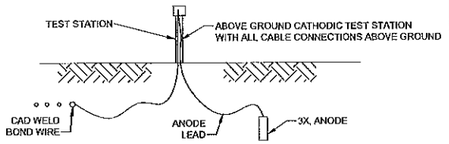
NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Chris B. Balling	801 324-3619	Property Agent - ROW
SIGNATURE		**DATE**
N/A		4/28/2016



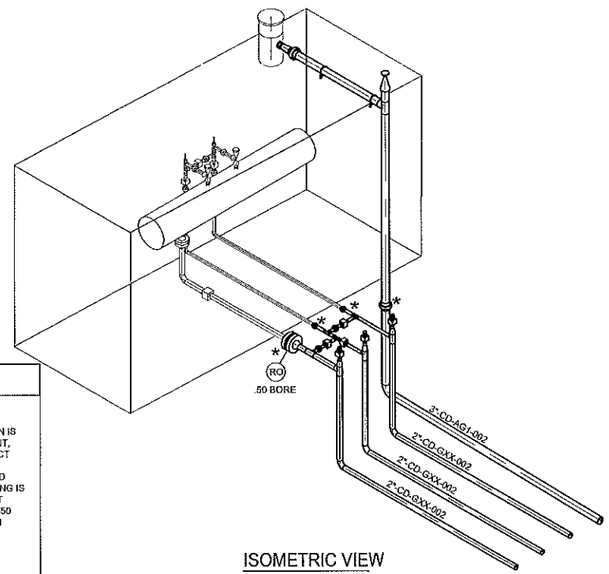
PLAN VIEW
SCALE: 1/4"=1'-0"

NOTE:
INSTALL ANODES 5-10 FT. (MINIMUM) FROM 3" LINE, KEEP TOP OF ANODE AT SAME DEPTH AS PIPE.

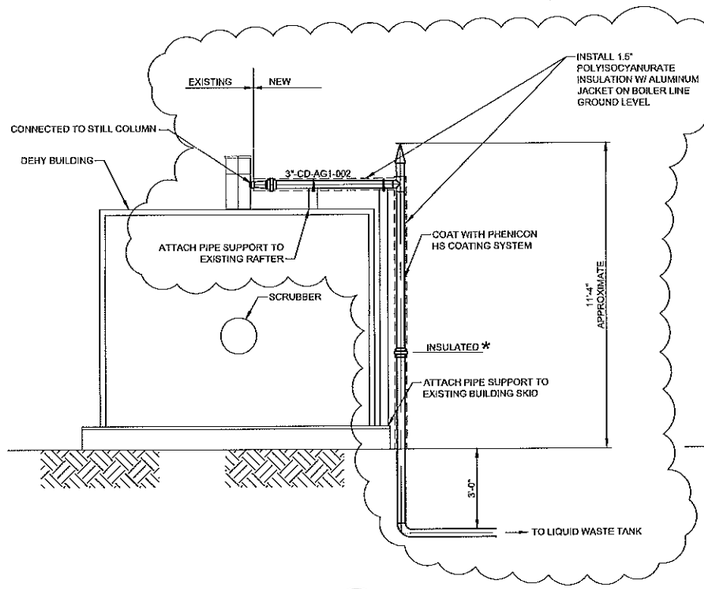
KEEP ANODES VERTICAL WHEN BURYING



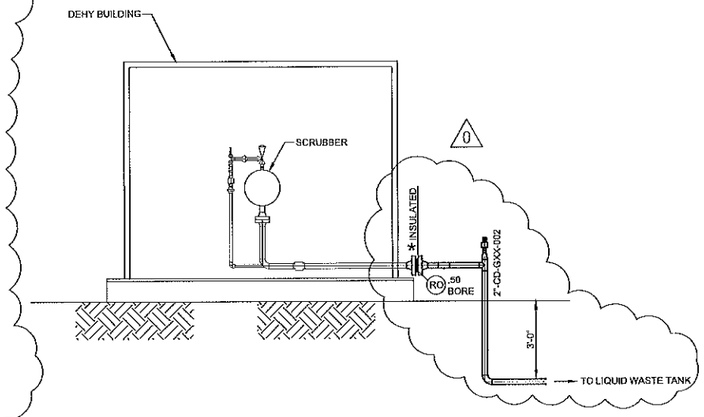
CATHODIC DETAIL
SCALE: NTS



ISOMETRIC VIEW
SCALE: NTS



SECTION A
SCALE: 3/8"=1'-0"



SECTION B
SCALE: 3/8"=1'-0"

UTAH BLUE STAKES

CALL FOR LOCATION OF UNDERGROUND UTILITIES
811 OR 1-800-662-4111

GENERAL NOTES

1. LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.
2. * INDICATES LOCATION OF ELECTRICAL ISOLATION FLANGE SETS. ENSURE THAT ELECTRICAL ISOLATION IS NOT SHORTED/BYPASSED THROUGH TUBING CONDUIT, STEEL PIPING SUPPORTS, ETC., THAT ARE IN CONTACT WITH THE PIPE.
3. BURIED FABRICATION PIPING SHALL BE CLEANED AND COATED. RECOMMENDED COATING FOR BURIED PIPING IS 2-PART EPOXY (IF PRACTICAL, REQUIRES GRIT BLAST PRIOR TO APPLYING COATING), TAPE COAT H35 OR H50 WITH PRIMER. TRENTON WAX TAPE (NUMBER 1 WITH GUARDWRAP) IS TO BE USED ONLY AS OVERWRAP. RECOMMENDED AT COATING TRANSITIONS OR WHENEVER SPECIFIED OR WHEN THE COATING APPLICATOR DEEMS NECESSARY. RECOMMENDED COATING FOR ABOVE GROUND PIPING IS TRENTON WAX TAPE NUMBER 2. ALL BURIED PIPING TO BE CATHODICALLY PROTECTED.
4. NEW PIPING IS INDICATED BY BOLD LINES (OR BY REVISION CLOUD).
5. FIELD VERIFY WALL THICKNESS AT ALL TIE-IN LOCATIONS.
6. PIG-ABLE PIPELINES SHALL BE FABRICATED WITH GUARD BARS INSTALLED WITHIN TEES.
7. ANY MATERIAL SUBSTITUTION OR CHANGES TO DESIGN REQUIRES ENGINEERING APPROVAL.
8. PIPING MTR'S SHALL BE ASSEMBLED PER SP-3-95-01.

ISSUED FOR CONSTRUCTION

REFERENCE DRAWINGS		
DRAWING NUMBER	REV	DRAWING DESCRIPTION

WORK ORDERS		
WO NUMBER	DESCRIPTION	DATE
01044747	ADDED LIQUID WASTE LINES AND WASTE TANK	1-19-16

REVISIONS				
NO	DESCRIPTION	DATE	BY	CHECK
0	ADDED LIQUID WASTE LINES AND WASTE TANK	1-19-16	NDP	

ENGINEERING RECORD	
DRAWN BY: NDP	
DATE CREATED: 7-29-15	
CHECKED BY:	
PROJECT ENGINEER: DELANCE W.	
SURVEYOR:	
ENGINEERING MNGR: GLV	
CONSTR MNGR: SMI	
APVD FOR CONSTR: 2-16-16	

QUESTAR Pipeline

SECTION: T R
ELEVATION: 6537 FT
LAT: 40.9914 LONG: -109.2126
SCALE: AS SHOWN

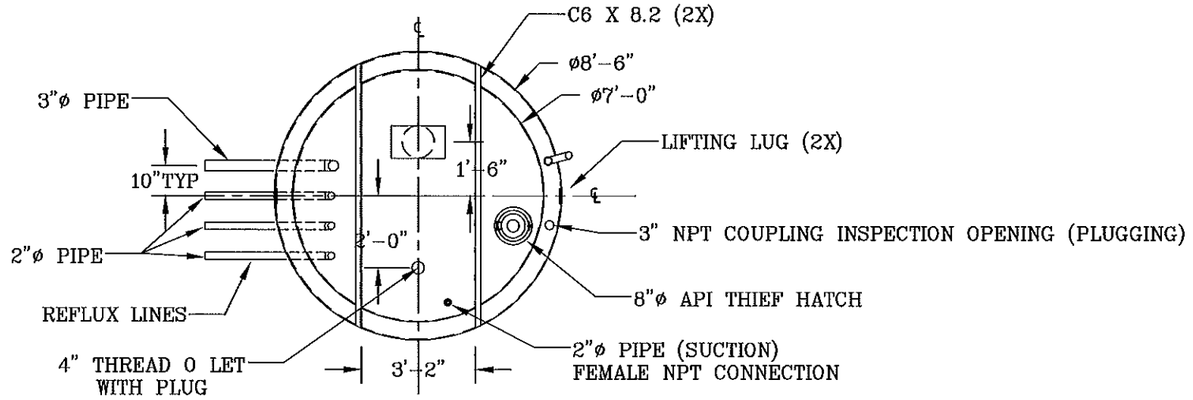
LINE NUMBER:
FACILITY:
TITLE: CLAY BASIN STORAGE PLAN AND SECTION VIEW WELL #2
DESCRIPTION:
ADDRESS:

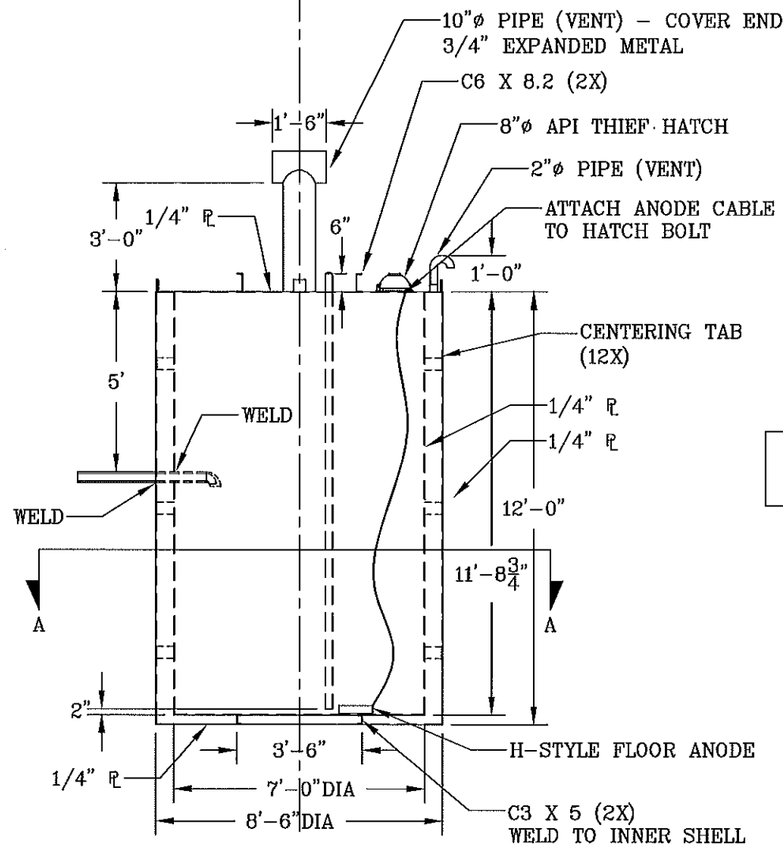
CITY	COUNTY	STATE
	DAGGETT	UT

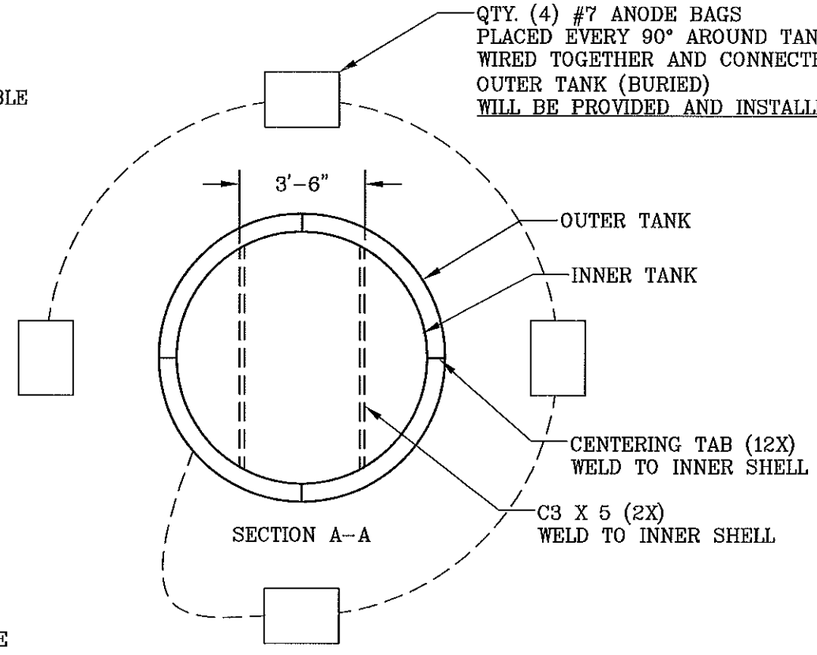
DRAWING NUMBER	SHEET	REVISION
QPC-S-CLAYS-PIP-W02	01	0

QPC-S-CLAYS-PIP-W02-01.dwg - 03/07/2016 - 07:47am

QUESTAR_ANSI_D







BOM		
QTY	DESCRIPTION	PART
2	6' X 26' X 1/4" PLATE	OUTSIDE SHELL
2	6' X 23' X 1/4" PLATE	INSIDE SHELL
2	9' X 9' X 1/4" PLATE	OUTSIDE TOP & BOTTOM
1	8' X 8' X 1/4" PLATE	INSIDE BOTTOM
1	10" SCH 10 PIPE - 5' LONG	VENT 10"
1	2" SCH 40 PIPE - 20' LONG	SUCTION & REFLUX LINES
1	3" SCH 40 PIPE - 3' LONG	REFLUX LINE
2	2" SCH 40 90° WELD ELBOWS	VENT 2"
1	8" API THIEF HATCH	
1	24' X 24' X 3/4' EXPANDED METAL	VENT 10"
2	C6 X 8.2 CHANNEL - 8' LONG	TOP STIFFENER
2	C3 X 5 CHANNEL - 7' LONG	INNER TANK RISER
12	4" X 8 15/16" X 1/4" FLAT BAR	CENTERING TABS

QUESTAR
BURIED LIQUID TRAP
SHOP DRAWING

NOTE:
TANKS BUILT TO TO API 12F BUT NOT STAMPED

PRESSURE/LEAK TEST - 2.5 PSIG FOR 1 HOUR

COATINGS -QPC STANDARD PRACTICE, SYSTEM 15
TWO PART EPOXY; URETHANE FOR STEEL
SUBSTRATE

PAINTING - CARLSBAD CANYON

ALL BELOW GRADE PIPE CONNECTIONS
TO BE BEVELED

ADD O-LET (2X) FOR PRESSURE TESTING BOTH
INNER AND OUTER SHELL - PLUG AFTER TEST

WELD ROOF TO INNER SHELL-
WELD ROOF TO OUTER SHELL-
FLIP ASSEMBLY-
WELD REFLUX LINES INSIDE INNER SHELL-
WELD INNER FLOOR TO INNER SHELL-
WELD OUTER FLOOR TO OUTER SHELL-
WELD REFLUX LINES ON OUTSIDE

GREENS ENERGY SERVICES INC.
3037 YELLOW STONE ROAD
ROCK SPRINGS, WY.

SHOP DWG.	P.O. #
QUESTAR	DRAWN BY: JOM
	CHECKED BY: RG
	SCALE: 1/4"=1'
	DRAWING # / REV.
	XXXXXXXX / 2